PARTICIPATION PATTERNS STUDY

Report of the Committee
to Examine Participation Trends
of Alberta Post-Secondary Students

SUMMARY REPORT

JUNE 1984

Alberta
ADVANCED EDUCATION

PARTICIPATION PATTERNS STUDY

REPORT OF THE COMMITTEE
TO EXAMINE
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POST-SECONDARY STUDENTS

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PLANNING SECRETARIAT

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EXECUTIVE SUMMARY

- The report describes the enrolment trends and the mix of students participating in post-secondary education in Alberta from 1971 to 1981.

- The data contained in this report were based primarily on census data and post-secondary institutional reports. As this report deals only with data available from these two primary sources, it should be used with caution.

- With respect to Type I accessibility, or enrolment growth, the system has experienced phenomenal increases in the number of students attending post-secondary institutions.

- With respect to Type II accessibility, or social and economic group participation, a general overall decrease in participation rates was found. The decrease is in part attributed to very significant rates of inter-provincial migration and high labour force participation rates - both factors operating during the period surveyed for the study. In spite of this general decrease part-time and non-university participation rates increased between 1971-81.

- Increases in participation rates were observed for females, 22-24 year olds, students from French, German, and Native backgrounds; urban males, independent rural students, and by students from a parental education level of grade 8 or less.

- On the basis of a synthesis of highest and lowest levels of participation, two hypothetical student profiles emerge. The student most likely to attend a post-secondary institution in Alberta in 1981 appears to be an urban Ukrainian female, aged 18-21, with high socio-economic background, high parental education level and high family income. The student least likely to attend appears to be a rural, Native male, aged 22-24, with low socio-economic background, low parental education level and low family income.

I. INTRODUCTORY REMARKS

1. FORMATION OF THE STEERING COMMITTEE

On October 28, 1982, Hon. J. D. Horsman, Minister of Advanced Education and Manpower, announced his intention to form a committee to study post-secondary participation patterns among Alberta students. The Participation Patterns Study Steering Committee was established and began its study in November, 1982. It was comprised of a Chairman, five public representatives, three student representatives; two representatives from the Department of Advanced Education and Manpower, and one representative liasing with the Minister's office. The Steering Committee was also provided with a secretary from the Department of Advanced Education and Manpower.

2. TERMS OF REFERENCE

The major functions of the Steering Committee were as follows:

1. To study the patterns of participation by individuals in Alberta's post-secondary education system through the detailed examination of 1971, 1976 and 1981 Canada census data.

2. To determine participation trends amongst broad groups based on gender, cultural and socioeconomic backgrounds and rural/urban residency.

3. To oversee the performance of the Planning Secretariat of Advanced Education in the preparation of the final report to the Minister.

4. To provide a complete report of its activities, its results, and its conclusions to the Minister of Advanced Education and Manpower for his consideration.

5. In accordance with the general terms of reference the Steering Committee shall establish its own procedures and guidelines to complete its task.

6. It is intended that the Steering Committee will begin its activities on or about November, 1982 and be completed by March 31, 1984. The nature of this study requires that close communication between the Minister and the Steering Committee be maintained. The Chairman of the Steering Committee and the liaison to the Minister's office will provide progress reports to the Minister.

3. MEMBERSHIP OF STEERING COMMITTEE

CHAIRMAN	Dr. B. D. Heemsbergen Edmonton, Alberta
PUBLIC MEMBERS	Mr. R. Ainscough University of Lethbridge, Senate
	Mr. D. Brimacombe Northern Alberta Institute of Technology
	Dr. T. Leadbeater University of Alberta, Senate
	Mr. B. Lord Grant MacEwan Community College
	Mr. K. Sveinson University of Calgary, Senate
STUDENT MEMBERS	Mr. P. Christiansen (ex83) Grant MacEwan Community College
	Miss S. Hermus Olds College
	Mr. A. Kuysters (ex83) Southern Alberta Institute of Technology
	Miss D. Nykilchuk Northern Alberta Institute of Technology
	Ms. J. Styles University of Alberta
DEPARTMENTAL REPRESENTATIVES	Mr. B. Bell
	Dr. A. Gabregiorgis
LIAISON MINISTER'S OFFICE	Mr. A. Hallman
EXECUTIVE SECRETARIES	Mr. Jerome Ell (ex83)
	Mr. Patrick Fafard

4. ALBERTA POST-SECONDARY INSTITUTIONS AND SERVICES

Alberta currently has thirty-one post-secondary institutions which can be grouped into five levels: universities, colleges, technical institutes, vocational centres and schools of nursing. Three universities -- the University of Alberta (Edmonton), the University of Calgary and the University of Lethbridge -- fulfill the traditional functions of a university in teaching, research, professional training, community service and social criticism. A wide range of programs at the undergraduate and graduate levels is provided. Athabasca University is designed to provide university-level programs through non-traditional teaching methods for students located in both urban centres and in the remote areas of Alberta. The Banff Centre is a residential centre for further education in the areas of fine arts, management studies, environmental studies, and language studies. It was formerly administered through the University of Calgary but became an autonomous institution with an independent board of governors. Its fine arts programs are unique in stressing the performance aspect of the particular discipline involved. Each university and the Banff Centre are administered by boards of governors. Ten public colleges are located in Lethbridge, Medicine Hat, Calgary, Red Deer, Edmonton, Lloydminster-Vermilion region, Olds, Grande Prairie, Fort McMurray and Fairview. These colleges are administered by boards of governors and serve a variety of needs in the local communities through one and two-year career-oriented certificate/diploma programs, university transfer and apprenticeship programs at some colleges, and a wide range of further education and community service programs. The four private colleges: Kings College, Concordia College, Camrose Lutheran and Canadian Union, mostly provide transfer programs. The three technical institutes, N.A.I.T., S.A.I.T., and Westerra are also administered by boards of governors and are located in Edmonton, Calgary, and Stony Plain respectively. They offer one and two-year technical and technology programs as well as a wide range of technical training programs for apprentices. Alberta Vocational Centres and the Community Vocational Centres, provincially administered institutions, are located in Calgary, Edmonton, Grouard, Lac La Biche and Slave Lake. These institutions are designed to assist disadvantaged students to enter the labour force and also provide short-term programs such as adult upgrading and nursing assistant. The Alberta Petroleum Industry Training

Centre, a provincially administered institution, provides physical facilities and instructors to teach courses emphasizing safety practices as well as many of the skills and techniques required in the drilling industry. The hospital-based schools of nursing at the Misericordia Hospital, the Royal Alexandra Hospital, the University of Alberta Hospital located in Edmonton, and the Foothills Hospital in Calgary became members of the Advanced Education system effective April 1, 1982. These schools offer diploma programs in nursing and nursing refresher programs. Psychiatric nursing programs are offered at Alberta Hospital, Ponoka, and at Alberta Hospital, Edmonton.

Currently, at the board-governed institutions, admission policies are determined by the board of governors. Admission policies for the provincially-administered institutions are set by the Minister in consultation with the institutions involved.

5. INTRODUCTION

In Who Doesn't Get to University ... and Why, Robert Pike (1970) provides a contemporary view of accessibility.

> The concept of accessibility along with the concept of equal educational opportunity simply advocates the removal of these social, economic and psychological barriers to the development of abilities which may inhibit a child from achieving or desiring to achieve, the highest educational level of which he or she is capable.[1]

Accessibility is extremely difficult to measure; it involves an assessment of aspiration, motivation, aptitude and a number of subtle familial influences. Participation rates, on the other hand, render a more objective, however limited picture of post-secondary choice.[2] They provide us with a means of examining the composition of the student population with respect to gender, rural/urban location, ethnicity and socioeconomic background. Participation rates are, by inference, one of the best measures of accessibility that we have.

There are, however, certain limitations inherent in the concept of a participation study. We can derive little information from participation rates about how post-secondary choices are made. We have no information about the results of post-secondary education - retention rates and graduations rates, and no information about those who chose not to attend post-secondary education. There are certain limitations in terms of our data base as well. We are unable to examine participation by students over the age of 25 since the information available for these students is inconsistent with our information regarding 18-24 year olds. We cannot fully evaluate the impact of apprenticeship programs and post-secondary offerings at the province's alternative institutions since our census data include only universities, colleges and technical institutes.

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[1] Robert M. Pike. Who Doesn't Get to University and Why. Ottawa: Association of Universities and Colleges of Canada, 1970, p.3.

[2] A participation rate is derived by dividing the number of enrolees in a particular age group by the total population in that age group.

Despite these limitations, the study can and does tell us a great deal about post-secondary choice. In his essay, "Dimensions of a Decade - Higher Education in the Seventies", Edward B. Harvey states the following:

> How, then, should we measure equity of access here? First, we should measure it in terms of outputs as defined above. That is, we should examine the characteristics of our students to see how representative they are of Canadian society.[3]

This expresses, in part, the mandate of this study. By analyzing the composition of the Alberta post-secondary population over a ten year period, we may draw some conclusions about the degree of access enjoyed here.

In Alberta, equity of educational opportunity may be defined as providing post-secondary opportunity to all those qualified and motivated to attend, regardless of financial capacity. Thus, the offer is clear. What remains is reciprocity on the student's part.

The main report attempts to place participation, and thus, accessibility in a historical context as well as present the results of this particular study. The literature review, which is briefly described in the following section, represents the preliminary research undertaken to provide a background for the study and a context for the results. The main report also includes a methodology section describing the characteristics and limitations of the data. The results of the study are reported under two headings: Type I Accessibility and Type II Accessibility. The former is a review of enrolment growth during the period surveyed. Type II Accessibility presents the analysis of participation trends with respect to geographic location, sex, socioeconomic background and ethnicity. Tables and more detailed analysis of the results are available in the main report.

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[3] Edward B. Harvey. "Dimensions of a Decade - Higher Education in the Seventies" in From Quantitative to Qualitative Change in Ontario Education, ed. Garnet McDiarmid. Toronto: Ontario Institute for Studies in Education, 1976, p.7.

II. LITERATURE REVIEW

1. **Introduction.** The background to a study of this nature can involve two types of preliminary research. The first type involves a survey of existing literature on the topic. This may include either historical background or original research. In the case of the participation study, the literature review includes both an examination of the history of accessibility, and a survey of studies pertaining to barriers to participation. The second type of preliminary research involves placing the research topic into a contemporary context. This literature review attempts to describe the policy context, the socioeconomic milieu in which the study was performed.

2. **Historical Development of Philosophy and Policy.** The first section of the literature review traces the historical development of the concept of equality of educational opportunity and accompanying educational policy developments. We examine this development in three stages: pre-industrial, industrial and modern periods. The development of the concept of educational equality and policy during these periods involved a set of judgements as to who was considered educable, education as a right or a privilege, and the responsibility for the provision of this education. While equality of educational opportunity had no relevance in pre-industrial society, the social and economic advances of the industrial revolution prompted a reassessment of educational policy. Higher education was still the province of the elite, but a minimum of formal schooling was gaining prominence as a "right" of the populace. During the modern period, the concept of equality of educational opportunity assumed that opportunity lies in exposure to a given curriculum. The realization that the relationship between school and student might be considerably more complex than this provided the impetus for a contemporary reappraisal of the concept of equity of educational opportunity. The societal and political upheavals of the last two decades were reflected in educational policy and philosophy. The perception of students as human capital and an increase of educational expectations brought accessibility to post-secondary education into sharp focus. This was accompanied by an explosive growth in post-secondary

facilities and the acceptance of the idea that everyone was entitled to the fulfillment of their educational aspirations.

3. **Post-Secondary Education in Alberta: A Policy Perspective.** The second section of the literature review describes the history of the Alberta post-secondary system and the implementation of Provincial policies affecting accessibility. In an attempt to provide a background for post-secondary development in Alberta, the paper discusses: the early history of post-secondary education in Alberta; the physical expansion of the system; and specific programs initiated to accomodate special groups. Particular areas of concern identified in Alberta include rural/urban participation differences, continuing education, and education for Native persons. Policy objectives related to these needs include: reducing geographic, age, employment and socioeconomic barriers to participation; and ensuring that physical capacity exists to meet demand. The government policies instituted to realize these objectives include: student financial assistance support, the coordination of the post-secondary system, and the decentralization of post-secondary services.

4. **Factors Affecting Post-Secondary Participation.** The third section of the literature review is comprised of a survey of accessibility studies pertaining to the socioeconomic background, sex, geographic location and ethnicity of post-secondary age youths. Socioeconomic background is cited by many studies as the single most powerful influence on the education and career choices of a potential student. The parental education, parental occupation and family income which constitute a child's socioeconomic background exert both subtle and self-evident influences on his/her attitudes and beliefs. The studies surveyed reach similar conclusions about how this affects post-secondary participation. Students from higher socioeconomic status backgrounds are more likely to finish high school and more likely to pursue a post-secondary education.

   The studies examining gender differences in post-secondary education reveal two major trends in the participation patterns of women. The first is that the participation rates of women have increased substantially in the last twenty years and, in some cases, exceed those of their male counterparts. The second major finding is that despite these encouraging gains, women still tend to be concentrated in traditionally female fields of study, and are largely under-represented in the fields of science and technology.

Post-secondary decisions may also be influenced by a student's proximity to a post-secondary institution. The size of one's community is also thought to affect aspiration, and expectation of post-secondary attendance. The studies surveyed found that rural youths and youths from small centres tend to be of lower socioeconomic status than urban youth; less exposed to communication media, career information; and less mobile. This, in turn, affects their rates of participation, which tend to be lower than those of students from urbanized backgrounds.

The general premise of the studies surveyed regarding ethnicity is that ethnic affiliation may affect post-secondary participation in a consistent manner by influencing the aspirations and attainment of prospective students. The participation rates of students do appear to vary according to their ethnicity. The most significantly disadvantaged group in this respect, in Canada, is the Native Indian. In some cases, low participation rates by certain groups are a function of their socio-economic background as well as of their ethnicity.

III. RESULTS

1. **Introduction.** The results of this study come under two headings, Type I Accessibility and Type II Accessibility. Type I Accessibility is simply the provision of physical space and resources to accomodate demand. In looking at Type I Accessibility, we examine enrolment increases throughout the post-secondary system, without any consideration for the age, sex or ethnicity of these students. The Alberta post-secondary system has witnessed phenomenal enrolment growth during the ten year period under consideration for this study. Therefore, we can surmise that the system has met with considerable success under the requirements of Type I Accessibility.

   Type II Accessibility examines the composition of these enrolment numbers. In other words, while we may have increased enrolments, we must look at those numbers to monitor the representation of various groups in the post-secondary population. Using participation rates, we can examine post-secondary attendance according to gender, rural/urban location, ethnicity and socioeconomic background of the students.

2. **Type I Accessibility.** Alberta has enjoyed an extremely high level of post-secondary attendance, despite the number of desirable alternatives available in the labour force during the decade under consideration for this study. Although admittedly limited in addressing the issue of accessiblity, enrolment trends are frequently utilized in preliminary measures of accessibility. In this section, we examined enrolment increases in full-time studies, part-time studies, apprenticeship programs and non-credit programs, by institution and year.

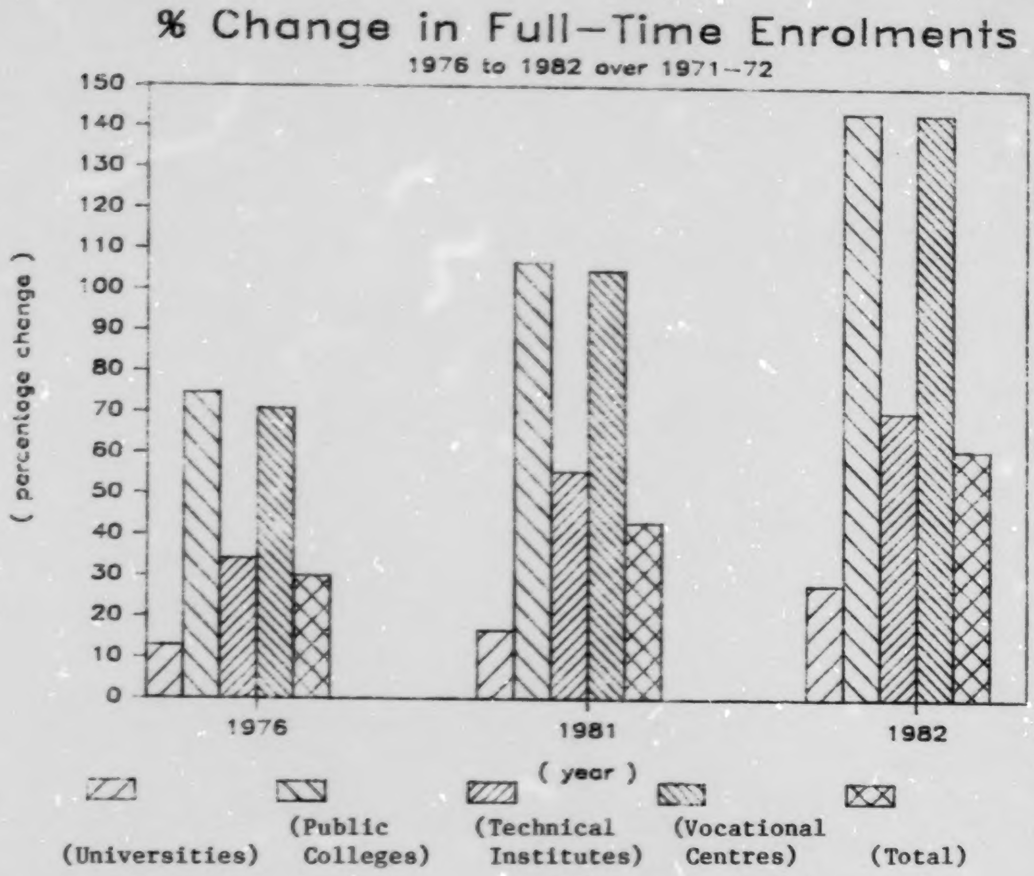

FIGURE 1

2.1 Full-Time Enrolments

As shown in Figure 1, between 1971-72 and 1982-83, full-time enrolment at Alberta's universities, public colleges, technical institutes and private colleges increased by 51%, from 41,058 to 61,022. The percentage increases were most dramatic for public colleges and vocational centres, with vocational centres increasing their registrations by 144 per cent from 5,456 to 13,297. Private colleges (included in total) have increased their full-time enrolment by over 100%. Both college and vocational centres have attempted to provide access to post-secondary education for students whose academic history would have limited such an opportunity in the past.

Enrolments in universities and technical institutes also increased significantly, by 8,045 and 4,679 respectively. The relative proportions of the sectors have changed dramatically. Non-university sector enrolments comprised 39% of total enrolments in 1971, compared to 52% of enrolments in 1982. These system-wide increases are particularly significant in the context of other post-secondary systems. The average annual increase for Canada, between 1971 and 1982, was 3.9%. In Alberta the average annual increase for the same period was 4.6%.

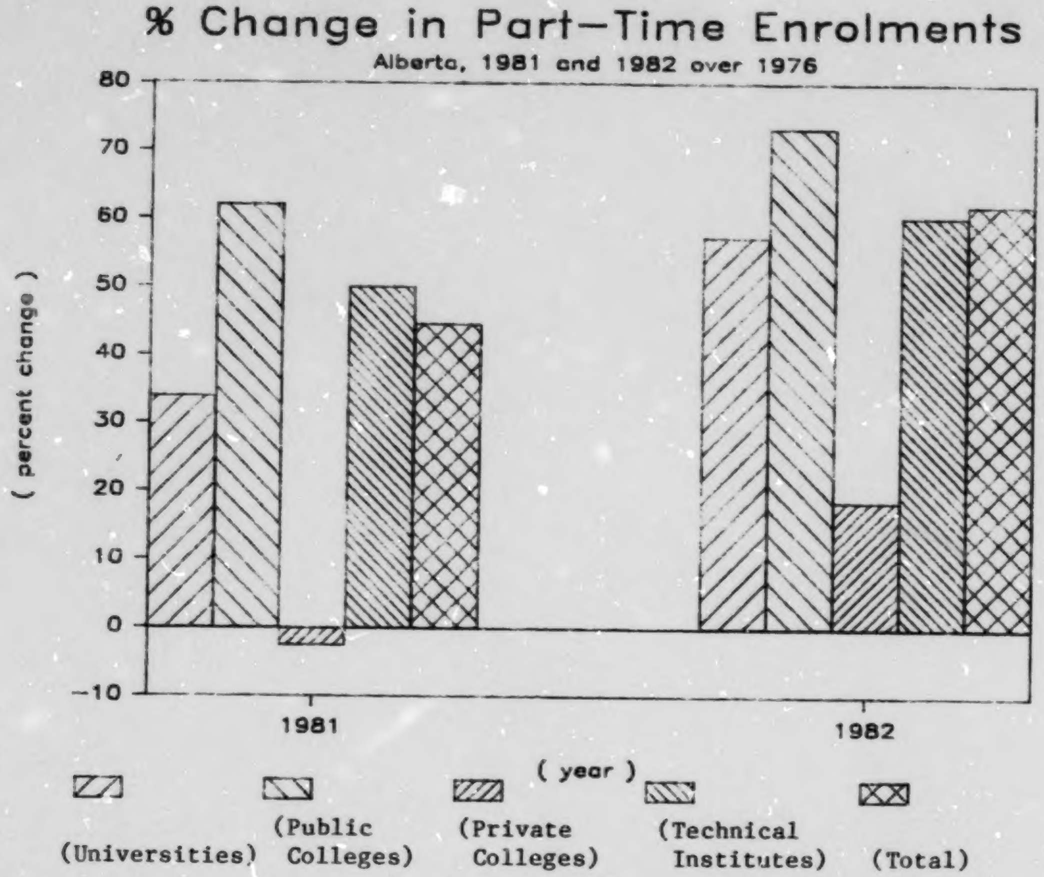

FIGURE 2

2.2 Part-Time Enrolments

Although data are not available for all institutions from 1971, one has only to examine the trend from 1975-76 to 1982 to note dramatic increases in part-time attendance. Part-time enrolments in universities, public colleges, private colleges and technical institutes increased during this period by 62% from 46,396 to 75,258. (See Figure 2). The percentage increases were the most dramatic for the public colleges; between 1976-77 and 1982-83, this sector registered an increase of nearly 42%, from 12,215 to 21,191. Both the university and technical institute sectors reported significant growth during this period, with the latter reporting a 38% increase over a 6-year period while the universities experienced a 37% increase during the same time frame. In terms of raw numbers, the universities led the increase with 14,005 additional enrolments while the figures for the public colleges and technical institutes are 8,976 and 5,852 respectively. The increase at the private colleges has been less dramatic but nevertheless significant. Much of the increase at the universities has occurred since 1980-81, while at the technical institutes the biggest increase occurred in 1980-81.

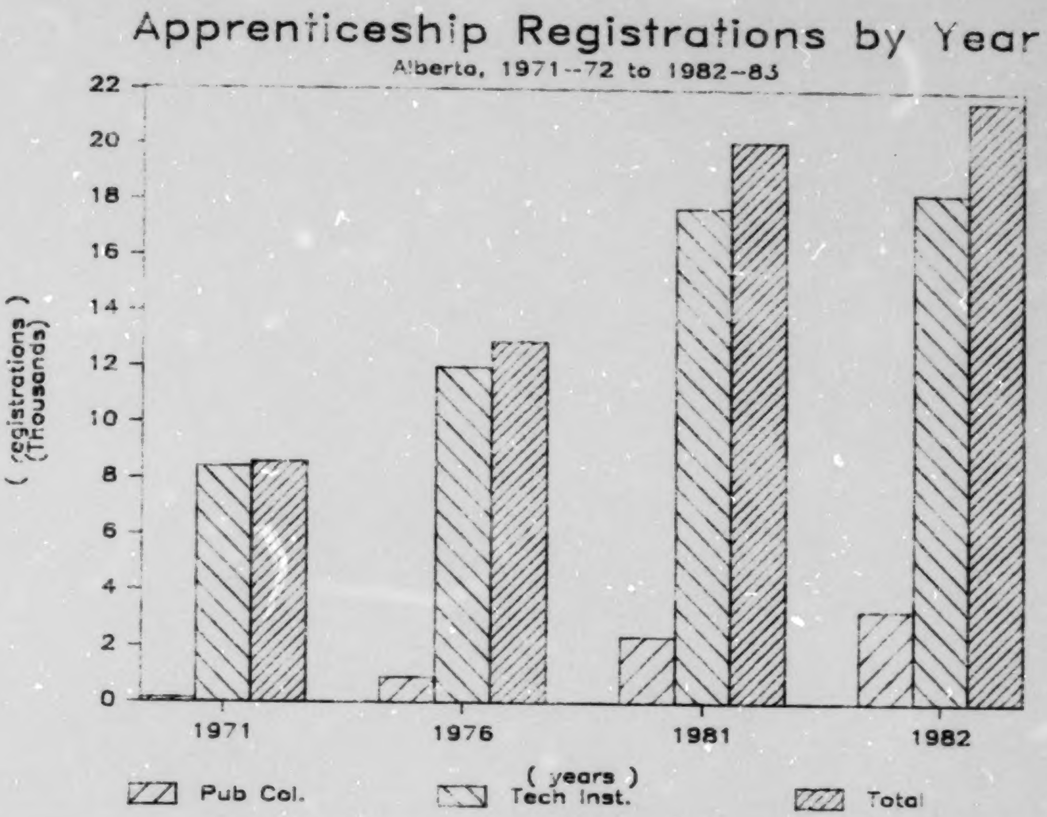

FIGURE 3

2.3 Apprenticeship Registrations

Apprenticeship training has reflected the dual opportunity available to all Albertans in its unique function of training in conjunction with work. That is, Alberta supported a high level of labour force activity as well as a high level of post-secondary opportunity.

Apprenticeship programs are available through some public colleges and all technical institutes. Between 1975-76 and 1980-81 apprenticeship school attendance at public colleges increased by 173%, due mainly to the participation of six colleges in apprenticeship training in 1980-81, compared with four in 1975-76. The other venue of apprenticeship training, the technical institutes, witnessed a 53.4% increase in apprenticeship enrolments between 1975-76 and 1980-81. (See Figure 3).

Between 1971-72 and 1982-83, apprenticeship registrations increased from 8,599 to 21,647, or 152%. In 1971-72, the public colleges reported an apprenticeship enrolment of 160. By 1982-83 there were 3,332 apprenticeship enrolments in the public colleges sector. Similarly, the technical institutes have registered a phenomenal growth in apprenticeship enrolments over the ten year period, more than doubling between 1971-72 and 1982-83.

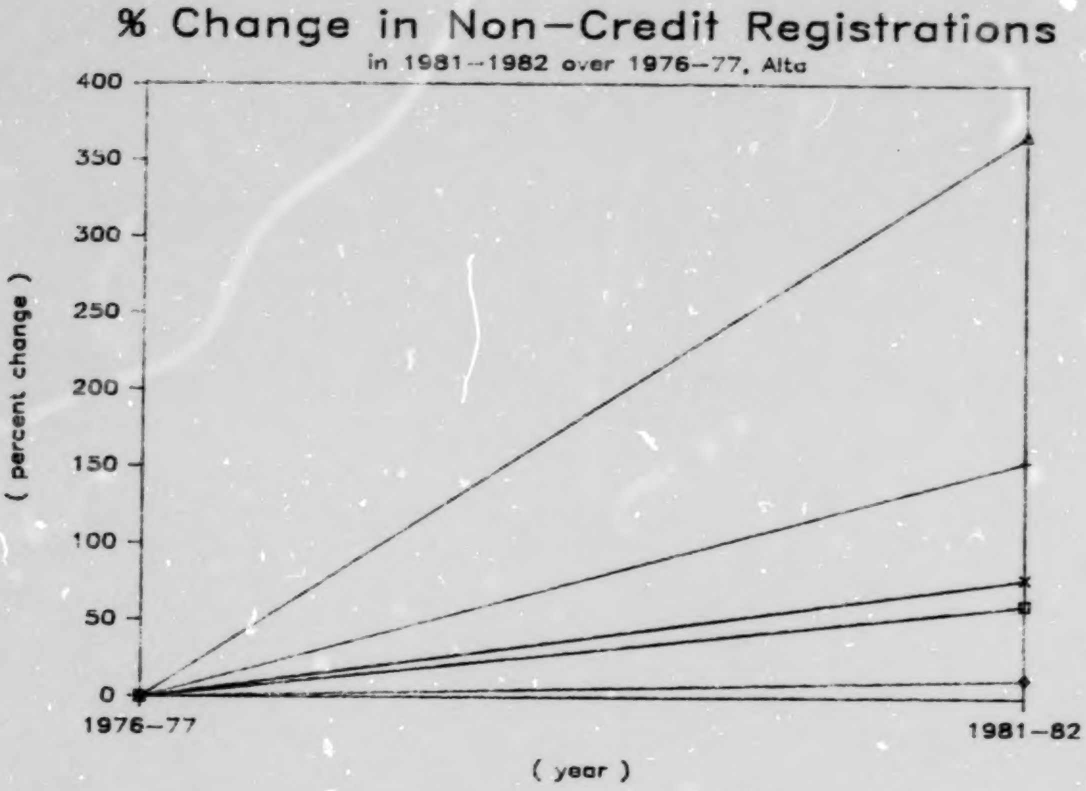

FIGURE 4

2.4 Non-Credit Registrations

Non-credit programming serves a dual purpose with respect to non-traditional students in terms of both age and distance. The Further Education Councils have gained a prominent position in this network over the last decade. Between 1971 and 1978 the number of Further Education Councils more than doubled and the number of participating adults increased by over five times. As of 1983, there were 93 Further Education Councils in operation throughout the province. Between 1976-77 and 1981-82, non-credit registrations increased 78% from 107,571 to 191,089. The public colleges led the increase with 39,316 more registrations over the period. At the universities and the technical institutes registrations rose 26,799 and 4,103 respectively. The Alberta Vocational Centres had an increase of 13,300 and along with the public colleges increased their participation in the non-credit area by a healthy margin. The increase in figures for enrolment in Further Education Councils from 152,760 in 1976-77 to the 1981-82 total of 239,854 provides evidence of phenomenal growth in this sector. (See Figure 4).

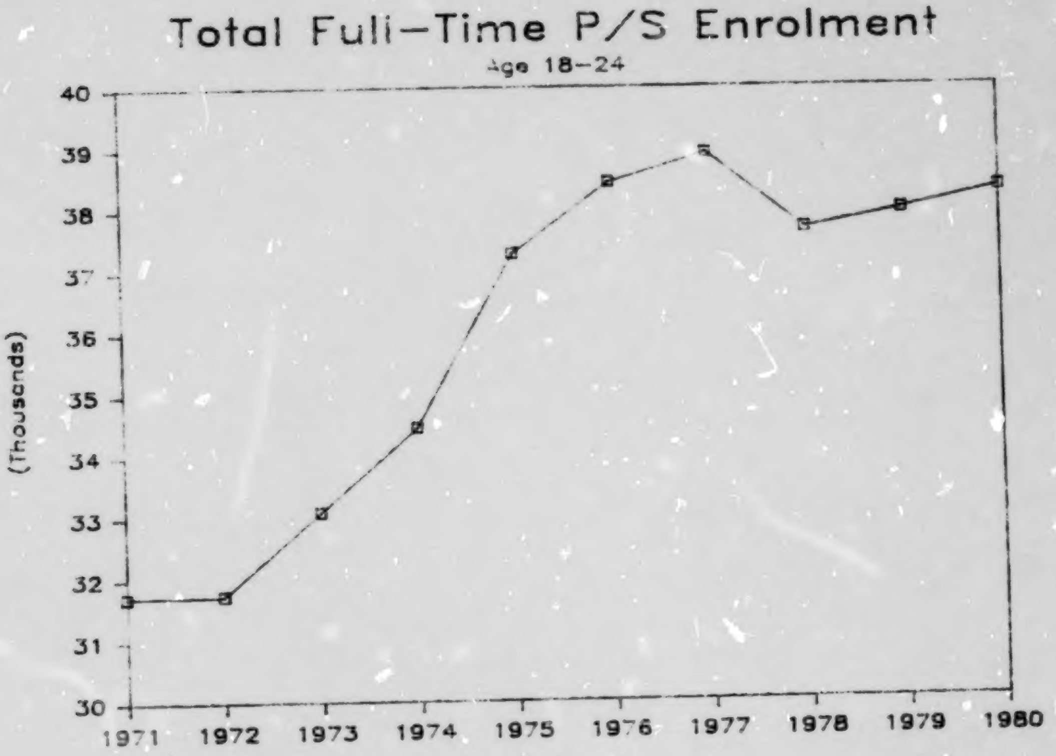

Figure 5

2.5 Total Full-Time Post-Secondary Enrolment - 18-24 Years Old

Alberta has experienced a decade of growth in its post-secondary system and subsequent enrolment growth in the 18-24 age group. Demographic changes, such as the effect of the latter half of the "baby boom" population, (1975-77) are also demonstrated in Figure 5. Between 1971 and 1980, full-time, 18-24 year old post-secondary enrolment increased from nearly 32,000 to more than 38,000, a 16% increase. The system reached a peak enrolment of approximately 39,000 in 1977.

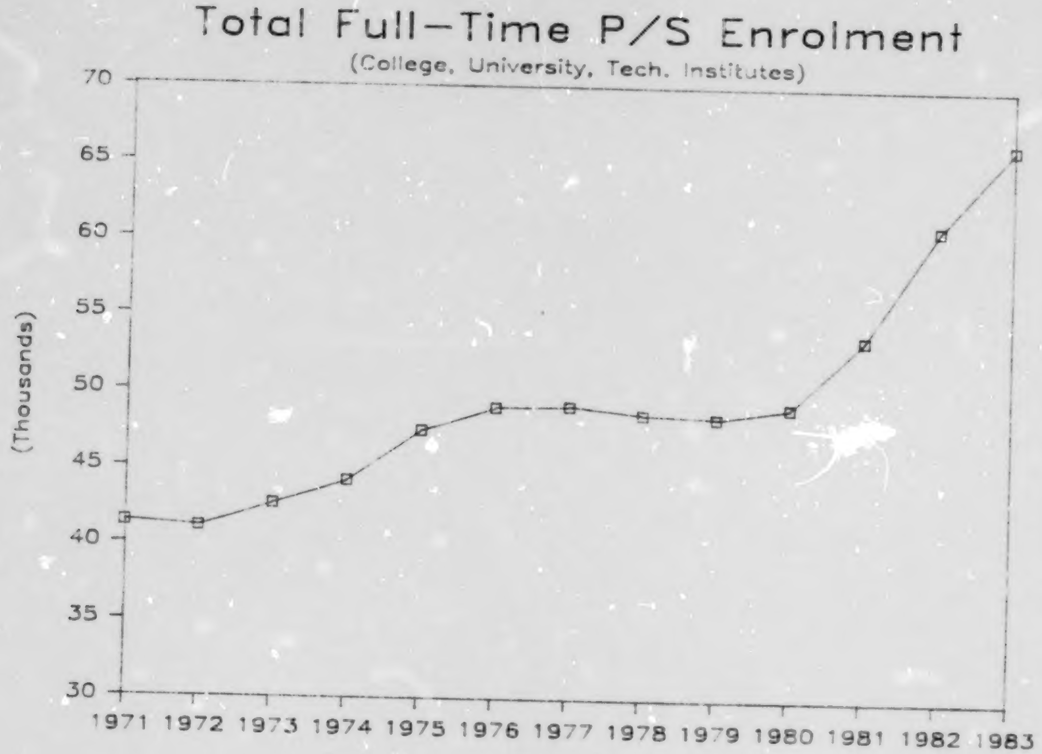

Figure 6

2.6 Total Full-Time Post-Secondary Enrolment

System-wide growth over a ten-year period as well as the most recent increases in post-secondary enrolment are illustrated in Figure 6. Here again, we see evidence of the baby boom population, although its effect is more accentuated when considering the 18-24 age group. The graph also illustrates a phenomenon which has recently impacted on the post-secondary system: an apparent relationship between labour market opportunities and enrolment growth. During uncertain economic times, (N.B. 1981-83) educational participation becomes a viable alternative.

2.7 DEMOGRAPHIC CHANGES AFFECTING PARTICIPATION

Migration has had a unique and powerful influence on the demographic profile of the citizens in the province of Alberta. The Statistics Canada report On the Move: Results of a Special Survey on Migration (1983) states that "one out of five individuals in the working age population in Alberta was a migrant, compared to one out of 25 in Quebec." (1983, p.88). In Alberta, in 1982, migrants comprised 27.1% of the married population ages 25-44 years, and 34.3% of the single population age 20-24 years. The effect of migration resulted in increased proportional representation by the population in the age groups 20-24 and 25-44, and decreased proportional representation in the remaining age groups. The results of this population movement have particular significance for the participation study.

TABLE 1
FULL-TIME ENROLMENT INCREASES VS POPULATION INCREASES: 1971, 1976, 1981

	1971	1976	1981	% change 1971-1981
Total Full-Time Enrolments*	41,058	50,525	54,737	33.0
Alberta Population (18-24)	202,200	252,865	358,300	77.0

* Full-time enrolments in universities, public colleges, private colleges and technical institutes.

Since the participation rate is calculated by dividing enrolees by the 18-24 aged population, significant growth of the denominator of this equation has implications for the participation rate. It may, therefore, be useful to examine the characteristics of this sector of the Alberta population.

The survey conducted by Statistics Canada provided general information about the characteristics of in-migrants to Alberta.[4] As already discussed, there is information about their age, relative to the rest of the Alberta population. We also know that migrants have achieved a higher degree of educational attainment than non-migrants. As a result of in-migration between 1976 and 1982, Alberta has experienced the greatest distributional change with respect to educational attainment of all the provinces. Excluding migrants, the working age population of Alberta in 1982 consisted of 15.0% of persons with 0 to 8 years of schooling, 56.3% with some secondary but no post-secondary education and 28.7% with at least some post-secondary education. The inflow of migrants changed this distribution to 13.2% of the working age population with 0 to 8 years of schooling, 54.8% with some secondary education, and 32.0% with some post-secondary education.

Based on this information we can make certain assumptions about migrant activity in the province of Alberta. Although the amount of inter-provincial transfer to Alberta's institutions has increased in recent years, migrants came to the province primarily for employment related reasons. In the "boom" years, which are also census years under study for their participation rates, a move to Alberta meant a greater probability of employment. There were more migrants employed after moving to Alberta than employed before their move. The employment level of in-migrants increased by 4.1% from 188,000 before migration to 195,000 after migration (Statistics Canada, 1983). The number of migrants in the labour force also increased by 8.9% from 226,000 before migration to 246,000 after migration.

Having ascertained this much about the labour force activities of migrants, we can also make certain assumptions about their post-secondary participation. Full-time participation rates of the recent migrants (migrants after June 1976) in post-secondary education, age 15 to 54, were below the rates of non-migrants by 35% for males and 13% for females. On the other hand, the participation rates of the migrants in part-time education were found to be higher than the non-migrants by over 200% for males and 50% for females. Similar differences were observed for persons age 17 to 24. Migrants are much more inclined than non-migrants to pursue skill-related post-secondary programs. The data also indicate that migrants preferred part-time to full-time attendance and college to university participation. The possible effect of migration on participation rates is highlighted below.

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[4] Statistics Canada, On the Move: Results of a Special Survey on Migration, May, 1983.

Participation Rate, 1976

$$\frac{50{,}525 \text{ (full-time post-secondary students)}}{252{,}865 \text{ (18-24 population)}} \qquad \text{Participation rate} = 20.0\%$$

Between 1971-1976 the net migration of 18-24 year olds totalled approximately 30,165.

Participation Rate Excluding Migrants, 1976

$$\frac{50{,}525}{222{,}727} = 22.7\%$$

Participation Rate, 1981

$$\frac{54{,}737 \text{ (full-time post-secondary students)}}{358{,}300 \text{ (18-24 population)}} \qquad \text{Participation rate} = 15.7\%$$

The total net migration for 18-24 year olds between 1976-81 was approximately 84,005.

Participation Rate Excluding Migrants, 1981

$$\frac{54{,}737}{274{,}295} = 19.9\%$$

The inclusion of migrants in calculating full-time participation rates in post-secondary education is estimated to reduce the average rate without migration by about 13% for the 17-24 age group and 20% for the 15-54 age group. Although there are a good deal of inherent methodological difficulties when attempting to factor out migrants, it is a worthwhile exercise if only to examine the possible effects of an inflated population on the participation rates.

3. TYPE II ACCESSIBILITY

A participation rate is derived by dividing the number of enrolees in a particular age group by the total population in that age group. The preceding section dealt with the first half of that equation in its description of enrolment growth over the last decade. The second section of the results deals with these enrolments in relation to the relevant population group. While enrolments have indeed risen over the ten year period under consideration for the study, participation rates have dropped. This reflects, as previously noted, a significant increase in the size of the 18-24 age group as a result of significant interprovincial migration which has increased at a rate of growth which has outstripped enrolment growth.

More specifically, participation rates give us information regarding Type II accessibility. While rising enrolments may indicate a positive trend, participation rates provide us with a means of measuring the progress of distinct social and economic groups. Thus, raw enrolment figures are only part of the picture. The participation rates of students according to gender, mother tongue, socioeconomic background and geographic location give a clearer picture of the mix of students attending post-secondary education in Alberta.

TABLE 2
SYSTEM-WIDE PARTICIPATION
(18-24 YEARS OLD)

	1971	1976	1981
Overall Participation Rate	21.1	23.1	20.4
Urban	22.4	24.9	21.5
Rural	15.8	15.1	14.6
18-21	24.5	25.1	22.0
22-24	16.6	20.4	18.5
Male	25.4	25.6	22.1
Female	16.8	20.6	18.7
Full-Time	16.9	17.5	14.8
Part-Time	4.1	5.6	5.7
University	14.6	12.6	11.0
Non-university	6.5	10.6	9.5

3.1 System-Wide Participation

System-wide participation has increased with respect to four variables over the ten year period: 22-24 year olds, females, part-time attendance, and non-university attendance.

The overall participation rate has declined between 1971 and 1981, from 21.1% to 20.4%. The participation rate of 18-21 year olds decreased during the same period, from 24.5% to 22.0%. Participation in university education declined from 14.6% in 1971 to 11.0% in 1981, while participation in non-university post-secondary education increased from 6.5% to 9.5%.

Between 1971 and 1976, a uniform increase was noted, with two exceptions: rural participation and university participation. The largest increases during this period were registered in the participation of 22-24 year olds, part-time students, female and non-university students.

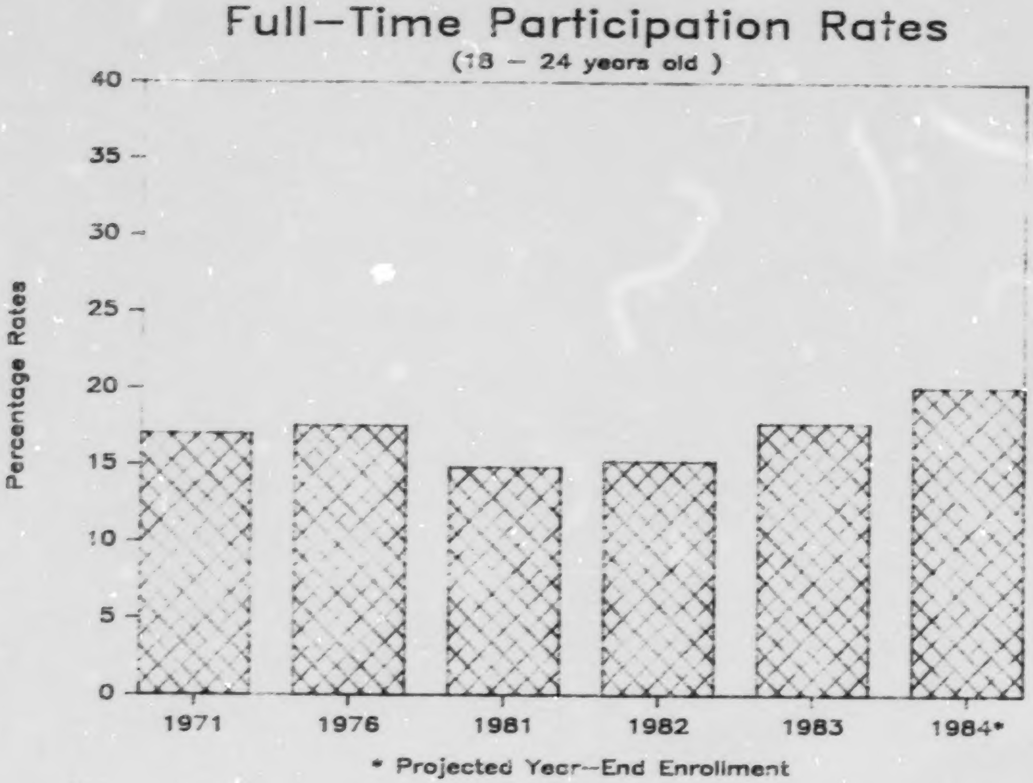

FIGURE 7

3.2 System-Wide Full-Time Participation

Full-time participation rates reflect the trends exhibited in overall participation rates.

Between 1971 and 1981, the full-time participation rates of 22-24 year olds increased from 10.8% to 10.9% and full-time participation in the non-university sector increased from 4.0% to 5.8%.

Between 1971 and 1976, there were increases in urban participation, and participation by 22-24 year olds, females and non-university students. During the same period there were decreases in rural participation and participation by 18-21 year olds, males and university participants.

Between 1981 and 1984, the full-time participation rate has increased steadily, rising to a rate well above the 1971 level.

TABLE 3
SYSTEM WIDE PART-TIME PARTICIPATION
(18-24 YEARS OLD)

	1971	1976	1981
Urban	4.6	6.1	6.0
Rural	2.1	3.4	3.7
18-21	2.8	4.3	4.0
22-24	5.8	7.5	7.7
Male	5.5	6.6	6.4
Female	2.7	4.6	4.9
University	1.6	1.4	1.9
Non-university	2.5	4.2	3.7
Overall Part-time Rate	4.1	5.6	5.6

3.3 System-Wide Part-Time Participation

An examination of part-time participation demonstrates, in some cases, a reversal of some of the trends established in overall and full-time participation.

Between 1971 and 1981, rural part-time participation has increased as well as participation by 22-24 year olds, females and university students. The overall part-time participation rate has also increased during this period.

Between 1976 and 1981, the gap between rural and urban participation decreased, as well as the gap between males and females and university and non-university students.

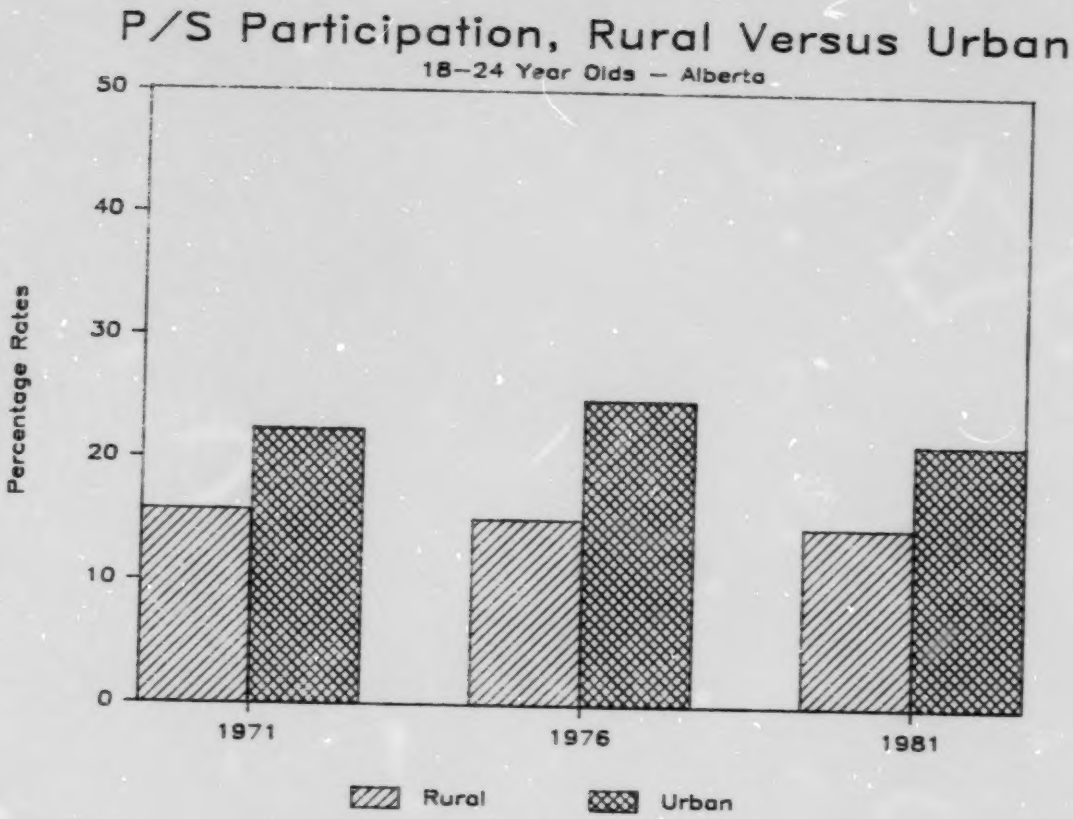

FIGURE 8

3.4 Post-Secondary Participation by Geographic Location

There has been little change in the patterns of participation between rural and urban students over the three census years. There has, however, been a perceptible change in the rates of participation.

Rural and urban participation rates have decreased slightly. This is reflected in a decrease in full-time participation in the university sector. The 1971-1976 period registered an increase and a subsequent decrease in 1981 for urban students.

Part-time rural and urban participation has steadily increased between 1971 and 1981 in both university and non-university studies; rural and urban full-time university participation has decreased over the same period.

In 1971, rural students participated in university twice as often as they participated in non-university studies. In 1981, their non-university participation exceeded that in the university sector. This trend exists among urban students as well, although it is not as accentuated.

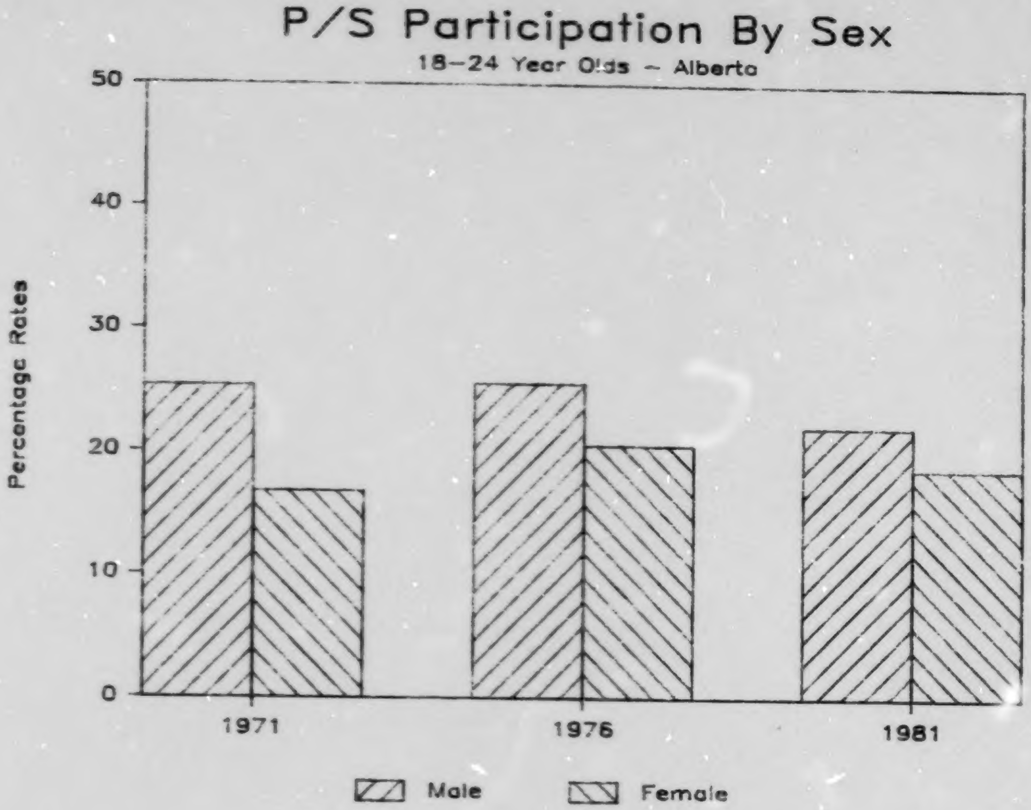

FIGURE 9

3.5 Post-Secondary Participation by Sex

In 1981 males participated in post-secondary studies at a higher rate than females. This difference in participation is maintained over the ten-year period. However, the 'gap' between male and female participation has decreased significantly.

Full-time participation has decreased for both sexes while part-time participation has increased. This is consistent with the overall general trend toward increased part-time enrolments. The one exception is male part-time university participation, which has decreased slightly over the ten-year period.

University participation has decreased for both sexes while non-university participation has increased. This, too, is consistent with the general trend.

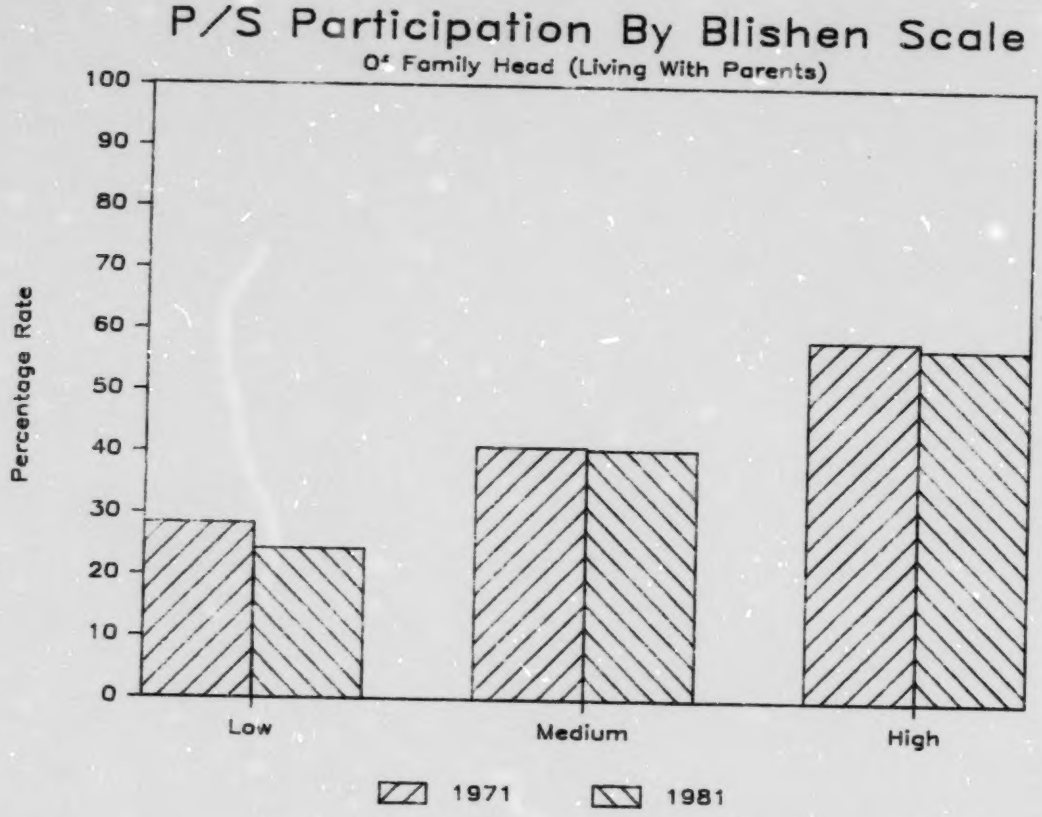

FIGURE 10

3.6 Post-Secondary Participation by Blishen Scale

Developed by Bernard Blishen (1967), the Blishen scale is a composite measure of the education, income and prestige of 320 occupations. A Blishen scale rating of 70 and above is assumed to represent a high level of education, income and prestige. Examples of professions in this category include: engineers, lawyers and university professors. A Blishen scale rating of 50-69 is assumed to represent a medium level of education, income and prestige. Examples of professions in this category include: middle management occupations. A Blishen scale rating under 50 is assumed to represent a low level of education, income and prestige. Examples of professions in this category include: sales clerks, repairmen, and food service workers.

As shown in Figure 10, there was an overall decrease in the participation rates for each category over the ten-year period. However, a significant increase for low, medium and high Blishen groups was found in non-university participation.

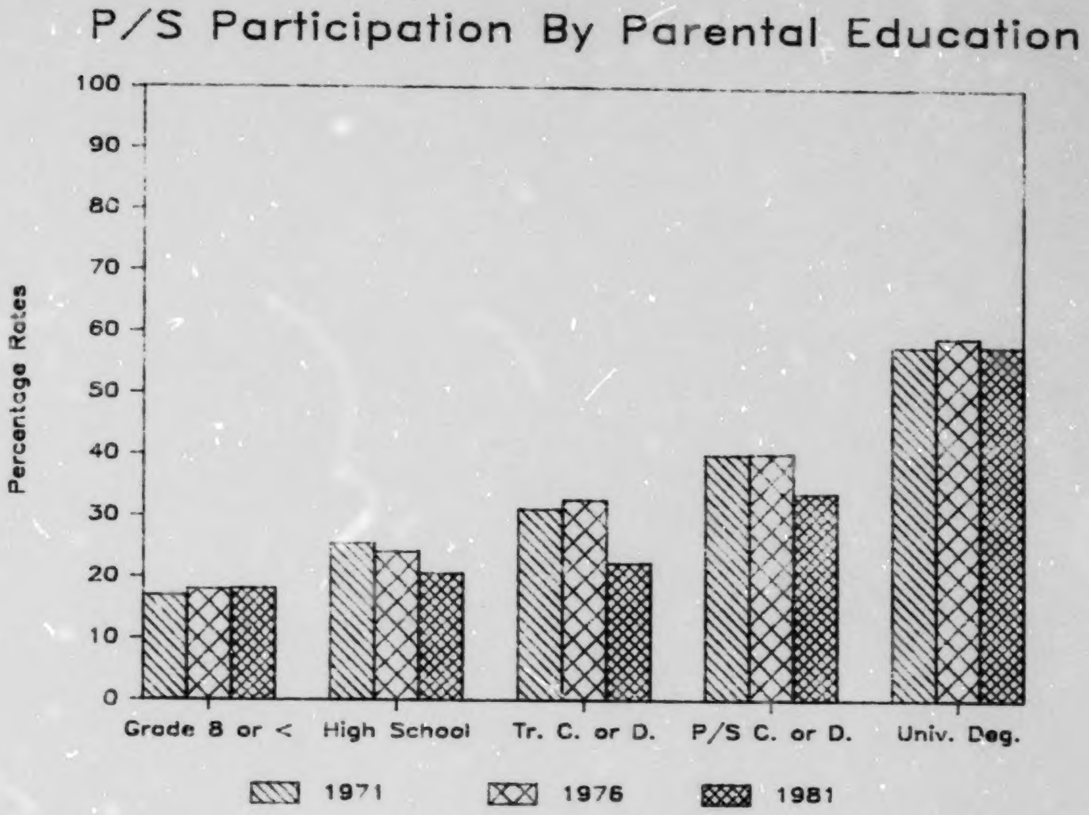

FIGURE 11

3.7 Post-Secondary Participation by Highest Level of Parental Education

University participation, full-time and part-time, has decreased considerably; non-university participation has increased for all educational levels.

The participation rate has decreased in all parental education categories except for the lowest and the highest levels, where the participation rate remained constant.

The 'gap' between the participation rates of students from the lowest and highest levels of parental education remained constant.

Note: Tr.C. or D. = Trade Certificate or Diploma
P/SC. or D. = Post-Secondary Certificate or Diploma
Univ.Deg. = University Degree

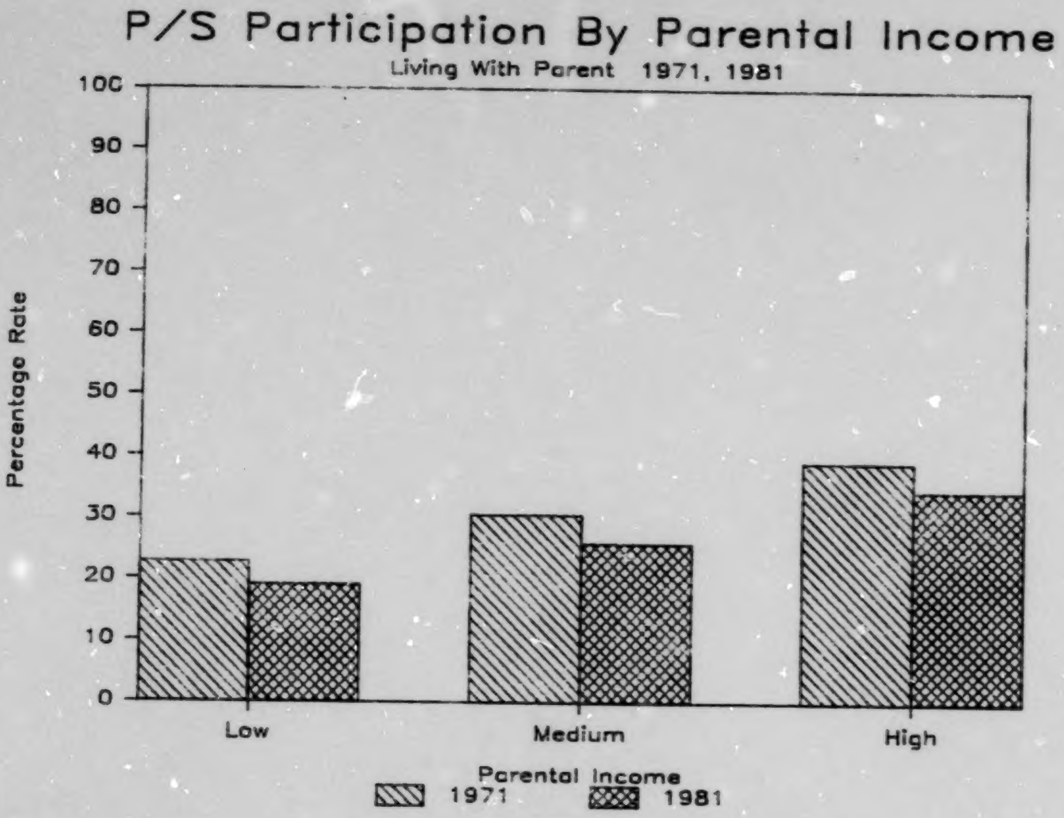

FIGURE 12

3.8 Post-Secondary Participation by Parental Income

The overall participation rate decreased slightly in all income categories. This may indicate that the general trend of reduced participation is not affected by the level of family income.

However, participation in non-university education has increased over the ten-year period for all income levels while university participation decreased. This too is a reflection of the general trend.

While there has been a slight decrease in participation overall, the 'gap' between the participation rates of students coming from the lowest and highest levels of family income decreased over the period 1971-1981.

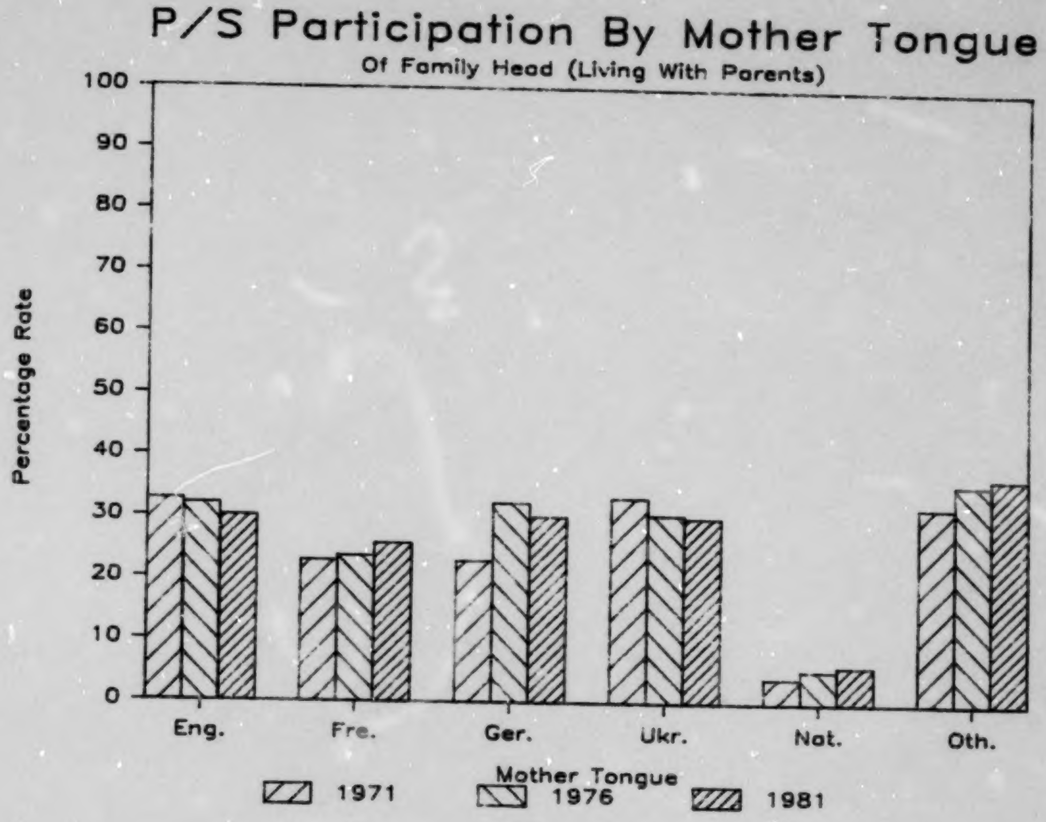

FIGURE 13

3.9 Post-Secondary Participation by Mother Tongue of Family Head

The participation rate of Natives continued to be significantly lower than other groups but rose considerably over the ten-year period.

The overall participation rate of students from German, French and Native mother tongue background increased between 1971-1981.

Students from English and Ukrainian backgrounds registered a slight decrease in their participation rates.

Part-time participation rates have increased for all mother tongue groups. This is also reflective of a general trend.

The overall participation in university studies decreased for all ethnic groups except for Natives. This is a reflection of the general trend away from the university sector.

IV CONCLUSION

With respect to Type I accessibility, or enrolment growth, the system has experienced phenomenal increases during the decade covered by the study. Alberta has enjoyed an extremely high level of post-secondary attendance, despite the number of desirable alternatives available in the labour force. While growth occurred in every sector of the system, the most dramatic increases were evident in the non-university sector. Other striking examples of system growth include part-time studies, apprenticeship training and non-credit enrolments. These increases attest to a high level of diversity in the system.

With respect to participation rates, the results are fairly consistent with the patterns established by other studies. Students from more advantaged backgrounds are more likely to attend post-secondary institutions than their less advantaged peers. This is particularly evident with respect to the level of parental education, level of family income and parental Blishen scale rating. In the case of "mother tongue", our proxy for ethnicity, there have been significant gains made by groups other than the traditionally predominant English group. The Native mother tongue group has nearly doubled their participation rate over the ten year period and the German mother tongue group has also experienced a significant increase over the same time period. There is some similarity in the trends in participation for geographic location and gender. In both instances, the traditionally disadvantaged groups, rural students and female students, have increased participation for those students living at home.[4]

Perhaps the most striking finding of the results is an overall decrease in participation rates. Although the amount of decrease is not substantial, it is nevertheless a trend worthy of comment and interpretation. There are suggested reasons for this drop in participation which may be unique to

---

[4] Census data distinguishes between students "living at home" (dependent on parents, or reporting parents' address) and students "not living at home" (independent from parents, and/or reporting different address).

Alberta. Alberta has, over the last decade, experienced an extremely high rate of interprovincial migration. Given the information we have about the characteristics of migrants, there is reason to believe that their primary motivation in coming to the province was not to attend post-secondary education but rather to accept or seek employment. Thus, their influx has inflated the population size of the 18-24 age group without corresponding increase in post-secondary enrolment. The other mitigating circumstance affecting post-secondary participation in Alberta is that of labour force participation. For instance, Albertan females reported the second highest labour force participation rate in the country for 1981. During the years under consideration for this study, Alberta has had one of the highest labour force participation rates in the country. Apparently this has been seen by many youths as a viable alternative to post-secondary participation. This discussion highlights a critical notion in any participation study. The belief that people benefit from participating in some form of post-secondary studies is for the most part a positive assumption. It is not entirely realistic, however, to assume that this is the only solution to career advancement. A majority of secondary school students enter directly into the labour force. Provided this decision is an informed one, and made with an awareness of the broad range of available choices and options, it is no less valid.

A decrease in participation rates is a trend which is currently being witnessed nation-wide as well as throughout the western world. In Canada, the decreases in participation rates have been particularily evident in the university sector. Demographic forecasts suggest that the size of the 18-24 age group will continue to decrease in the future, further depleting the traditional pool of applicants for post-secondary education. While demographic forecasts predict declining enrolments under ordinary circumstances, instability in labour market opportunities may continue to drive post-secondary enrolments up beyond anticipated levels. This trend is evident in Alberta, where 1982-1984 enrolments have been rising steadily, in a time of reduced labour activity. These trends may have implications for accessibility policies and participation patterns. In terms of accessibility, it may be of interest to monitor the relative participation of certain disadvantaged groups as enrolments continue to fluctuate for the traditional age cohort. In terms of participation patterns, it will be interesting to monitor the emergence of new groups which may displace the traditional participants in post-secondary education.

With respect to participation rates, and thus indirectly accessibility, the system has both achievements and shortcomings to its credit. The socioeconomic mix of students attending post-secondary education has not changed appreciably over the last decade; students from economically and educationally advantaged families still attend at a higher rate than their disadvantaged peers. At the same time, there are several groups which have made substantial gains over the last decade: Native students, German students, females, rural students, and non-university students have all increased their participation at the post-secondary level. Accessibility policy has enjoyed qualified success in Alberta. However, disparity among socioeconomic groups still exists, and is of continuing concern to policy makers.

It is apparent that the accessibility debate by scholars and policy makers will continue to be significant, contentious and engaging. The debate is likely to continue to focus on considerations of equity and equality. The orientation, however, may also reflect a stronger emphasis on efficiency and more precise diagnosis of socioeconomic group differences in dealing with matters of accessibility. The accessibility debate as it has been applied to education may also include a more concerted effort in facilitating the integral links with employers and other social institutions. The argument for a commitment to accessibility still stands; it has helped serve the needs of citizens in the past and will continue to do so in the future. It is important that we do not allow current stress to erode the philosophical basis of a policy which benefits Albertans qualified and motivated to participate in post-secondary education.

Number/
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2

PARTICIPATION PATTERNS STUDY

Report of the Committee
to Examine Participation Trends
of Alberta Post-Secondary Students

MAIN REPORT

JUNE 1984

Alberta
ADVANCED EDUCATION

PARTICIPATION PATTERNS STUDY

REPORT OF THE COMMITTEE
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PLANNING SECRETARIAT

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PREFACE

Accessibility is extremely difficult to measure; it involves an assessment of aspiration, motivation, aptitude and a number of subtle familial influences. Participation rates, on the other hand, render a more objective, however limited picture of post-secondary choice. They provide us with a means of examining the composition of the student body with respect to various social and economic variables. Participation rates are, by inference, one of the best measures of accessibility that we have.

There are certain limitations inherent in the concept of a participation study as opposed to that of an accessibility study. Participation rates are only one means of measuring accessibility. They do not, however, permit an analysis of the more subtle attitudinal and situational factors in post-secondary choice. We can derive little information about how these choices were made, at that crucial point of decision following high school. We also have no information about the results of post-secondary education -- retention rates and graduation rates among the groups under consideration for this study. Moreover, we are limited to an examination of the types of students who do participate; we have no information about those who do not participate. There are certain limitations in terms of our data base as well. We are unable to examine the participation patterns of mature students since the information available for those students over 25 is not consistent with our information regarding 18-24 year olds.

Despite these limitations, the results of the study can tell us a great deal about post-secondary choice in Alberta.

In his essay, "Dimensions of a Decade - Higher Education in the Seventies", Edward B. Harvey states the following:

> How, then, should we measure equity of access here? First, we should measure it in terms of outputs as defined above. That is, we should examine the characteristics of our students to see how representative they are of Canadian society.[1]

---

[1] Garnet McDiarmid, ed. From Quantitative to Qualitative Change in Ontario Education (Toronto: Ontario Institute for Studies in Education, 1976) p.7.

This expresses, in part, the mandate of this study. By analysing the composition of the Alberta post-secondary population over a ten-year period, we may draw some conclusions about the degree of access enjoyed by certain groups.

The following report attempts to place participation and, thus, accessibility in a historical context as well as present the results of this particular study. Definitions used in this study as well as the context for the conceptual debate are presented in Chapter II. The literature review, Chapter III, represents the preliminary research which provides both a background for the study and a context for the results. The first section of the review traces the development of accessibility and educational opportunity from its beginnings to contemporary discussions regarding access. The second part of the review describes the post-secondary system in Alberta, historically and with respect to policy. The third section is a review of studies of barriers to accessibility. Chapter IV, the methodology section, describes the characteristics and limitations of the data. The results of the study are reported under two headings: Type I Accessibility and Type II Accessibility. The former is a review of enrolment growth in the system during the period surveyed. Type II Accessibility presents the results of the analysis of participation trends with respect to geographic location, sex, socioeconomic background and ethnic background. The results of the study are discussed in Chapter V.

ACKNOWLEDGEMENTS

The members of the Steering Committee of the Participation Patterns Study would like to thank the following people for their support and assistance.

Dr. Edward Harvey of the Ontario Institute for Studies in Education was thought-provoking and challenging in his discussion of the study and his critique proved to be invaluable. Dr. Bill Workman's insights and comments further enhanced the report.

We gratefully acknowledge the assistance and cooperation of Wendy Salmon, from the Alberta Bureau of Statistics, and of our contacts at Statistics Canada, in providing the data for the study.

We would also like to express appreciation to Conni Massing for her efforts as primary researcher and author of the report. Brenda Hedstrom, who was responsible for putting the words into print, deserves special thanks for her patience with the innumerable revisions and pressing deadlines.

Finally - a special thanks to all those people who worked on the study in an administrative or advisory capacity, whose names and contributions are far too numerous to mention here.

B. D. Heemsbergen
Chairman
Edmonton, 1984

EXECUTIVE SUMMARY

° The report describes the enrolment trends and the mix of students participating in post-secondary education in Alberta from 1971-81.

° There are certain limitations inherent in the concept of a participation study as opposed to that of an accessibility study, as well as restrictions in our particular data base for this study. Participation rates do not permit an analysis of the more subtle attitudinal and situational factors in post-secondary choice; or of retention rates, graduation rates or the characteristics of non-participants. The data base does not provide information regarding students over the age of 25 and does not include enrolment data from institutions other than universities, colleges and technical institutes. Finally, data describing family characteristics is only available for students reported as "living at home", thus limiting the extent of our analysis regarding socioeconomic background and ethnicity.

° With respect to Type I accessibility, or enrolment growth, the system has experienced phenomenal increases. Between 1971 and 1982-83, full-time enrolment at Alberta universities, public colleges, technical institutes and private colleges increased by 51%, from 41 058 to 61 022. Between 1975-76 and 1982, part-time enrolment in universities, public colleges, private colleges, and technical institutes increased by 62% from 46 396 to 75 258. Between 1971-72 and 1982-83, apprenticeship registrations increased from 8 599 to 21 647, or 152%. Between 1976-77 and 1981-82, non-credit registrations increased by 78%, from 107 571 to 191 089.

° System-wide participation rates have decreased during the ten-year period under consideration for this study. Full-time participation rates reflect this trend. Part-time participation rates have, however, increased over the ten-year period. University participation has decreased over the ten-year period while non-university participation has increased. The 18-21 year olds participate in full-time studies at a higher rate than the 22-24 year olds. The reverse is true with respect to part-time studies.

° Between 1971 and 1981, there was an increase in participation by females, 22-24 year olds; students from French, German, and Native backgrounds; urban males, independent rural students, and by students from a parental education level of grade 8 or less. There was also an increase in participation in non-university and in part-time studies.

° Generally rural and urban participation rates have decreased slightly. However, rural students greatly increased their participation in non-university studies. In 1981, rural students tended to participate in the two sectors at approximately the same rate while urban students tended to participate in university studies at a much higher rate.

° Males continue to participate in post-secondary studies at a higher rate than females but the gap has narrowed significantly over the ten-year period. The 22-24 year olds males are much more likely to attend than 22-24 year old females. Females are more likely to participate in part-time university studies than males.

° With respect to post-secondary participation by Blishen scale rating, there was a decrease in the participation rates for each category over the ten-year period. Furthermore, youths from low to medium Blishen scale backgrounds tend to participate in part-time post-secondary studies more frequently than highly rated Blishen youths. Highly rated Blishen youths are much more likely to attend university while low to medium scale youths attend both sectors at approximately the same rate.

° As the level of parental education increases, so does the participation rate of the student. Between 1971 and 1981 the participation rate has decreased in all parental education categories except for the lowest and highest levels of parental education where the participation rate remained constant. As the level of parental education increases, so does the likelihood of the student attending university studies rather than non-university studies.

° The likelihood of post-secondary participation increases with the level of family income. Between 1971 and 1981, the overall participation rate decreased slightly in all income categories. Nevertheless, the "gap" between the participation rates of students coming from the lowest and highest levels of family income decreased over the same period. Students from high income families are much more likely to participate in university studies whereas students from low income backgrounds are just about as likely to participate in university as in non-university studies.

° With respect to mother tongue, the participation rate of Natives continued to be significantly lower than other groups but rose considerably over the ten-year period. The participation rate of students from German and French mother tongue background increased between 1971-1981. While students from English and Ukrainian backgrounds registered a slight decrease in their participation rates, all of the other ethnic groups reported an increase in participation.

° On the basis of a synthesis of highest and lowest levels of participation, two hypothetical student profiles emerge. The student most likely to attend a post-secondary institution in 1981 appears to be an urban Ukrainian female, aged 18-21, with high socioeconomic background, high parental education level and high family income. The student least likely to attend appears to be a rural Native male, aged 22-24, with a low socioeconomic background, low parental education and low family income.

° With respect to Type II accessibility the overall decrease in participation rates is in part attributed to very significant rates of inter-provincial migration and high labour force participation. Both of these factors were operative during the period surveyed for the study.

I. INTRODUCTORY REMARKS

1. FORMATION OF THE STEERING COMMITTEE

On October 28, 1982, Hon. J. D. Horsman, Minister of Advanced Education and Manpower, announced the formation of a committee to study post-secondary participation patterns among Alberta students. The Participation Patterns Study Steering Committee was established and began its study in November, 1982. It was comprised of a Chairman, five public representatives, three student representatives; two representatives from the Department of Advanced Education and Manpower, and one representative liasing with the Minister's office. The Steering Committee was also provided with a secretary from the Department of Advanced Education and Manpower.

2. MEMBERSHIP OF STEERING COMMITTEE

CHAIRMAN	Dr. B. D. Heemsbergen Alberta Advanced Education, Edmonton
PUBLIC MEMBERS	Mr. R. Ainscough University of Lethbridge, Senate
	Mr. D. Brimacombe Northern Alberta Institute of Technology
	Dr. T. Leadbeater University of Alberta, Senate
	Mr. B. Lord Grant MacEwan Community College
	Mr. K. Sveinson University of Calgary, Senate
STUDENT MEMBERS	Mr. P. Christiansen (ex83) Grant MacEwan Community College
	Miss S. Hermus Olds College
	Mr. A. Kuysters (ex83) Southern Alberta Institute of Technology
	Miss D. Nykilchuk Northern Alberta Institute of Technology
	Ms. J. Styles University of Alberta
DEPARTMENTAL REPRESENTATIVES	Mr. B. Bell
	Dr. A. Gabregiorgis
LIAISON MINISTER'S OFFICE	Mr. A. Hallman
EXECUTIVE SECRETARIES	Mr. Jerome Ell (ex83)
	Mr. Patrick Fafard

3. TERMS OF REFERENCE

The major functions of the Steering Committee were as follows:

1. To study the patterns of participation by individuals in Alberta's post-secondary system through the detailed examination of 1971, 1976 and 1981 Canada census data.

2. To determine participation trends amongst broad groups based on gender, cultural and socioeconomic backgrounds and rural/urban residency.

3. To oversee the performance of the Planning Secretariat of Advanced Education in the preparation of the final report to the Minister.

4. To provide a complete report of its activities, its results, and its conclusions to the Minister of Advanced Education and Manpower for his consideration.

5. In accordance with the general terms of reference the Steering Committee was to establish its own procedures and guidelines to complete its task.

6. It was intended that the Steering Committee would begin its activities on or about November, 1982 and be completed its task by March 31, 1984. The nature of this study required that close communication between the Minister and the Steering Committee be maintained. The Chairman of the Steering Committee and the liaison to the Minister's office would also provide periodic progress reports to the Minister.

4. ALBERTA POST-SECONDARY INSTITUTIONS AND SERVICES

Alberta currently has thirty-one post-secondary institutions which can be grouped into five levels: universities, colleges, technical institutes, vocational centres and schools of nursing. Three universities -- the University of Alberta (Edmonton), the University of Calgary and the University of Lethbridge -- fulfill the traditional functions of a university in teaching, research, professional training, community service and social criticism. A wide range of programs at the undergraduate and graduate levels is provided. Athabasca University is designed to provide university-level programs through non-traditional teaching methods for students located in both urban centres and in the remote areas of Alberta. The Banff Centre is a residential centre for further education in the areas of fine arts, management studies, environmental studies, and language studies. It was formerly administered through the University of Calgary but became an autonomous institution with an independent board of governors. Its fine arts programs are unique in stressing the performance aspect of the particular discipline involved. Each university and the Banff Centre are administered by boards of governors. Ten public colleges are located in Lethbridge, Medicine Hat, Calgary, Red Deer, Edmonton, Lloydminster-Vermilion region, Olds, Grande Prairie, Fort McMurray and Fairview. These colleges are administered by boards of governors and serve a variety of needs in the local communities through one and two-year career-oriented certificate/diploma programs, university transfer and apprenticeship programs at some colleges, and a wide range of further education and community service programs. The four private colleges: Kings College, Concordia College, Camrose Lutheran and Canadian Union, mostly provide transfer programs. The three technical institutes, N.A.I.T., S.A.I.T., and Westerra are also administered by boards of governors and are located in Edmonton, Calgary, and Stony Plain respectively. They offer one and two-year technical and technology programs as well as a wide range of technical training programs for apprentices. Alberta Vocational Centres and the Community Vocational Centres, provincially administered institutions, are located in Calgary, Edmonton, Grouard, Lac La Biche and Slave Lake. These institutions are designed to assist disadvantaged students to enter the labour force and also provide short-term programs such as adult upgrading and nursing assistant. The Alberta Petroleum Industry Training

Centre, a provincially administered institution, provides physical facilities and instructors to teach courses emphasizing safety practices as well as many of the skills and techniques required in the drilling industry. The hospital-based schools of nursing at the Misericordia Hospital, the Royal Alexandra Hospital, the University of Alberta Hospital located in Edmonton, and the Foothills Hospital in Calgary became members of the Advanced Education system effective April 1, 1982. These schools offer diploma programs in nursing and nursing refresher programs. Psychiatric nursing programs are offered at Alberta Hospital, Ponoka, and at Alberta Hospital, Edmonton.

Currently, at the board-governed institutions, admission policies are determined by the board of governors. Admission policies for the provincially-administered institutions are set by the Minister in consultation with the institutions involved.

II. DEFINITIONS AND CONCEPTUAL DEBATE

DEFINITIONS AND CONCEPTUAL DEBATE

The subject of equality is one that has challenged thinkers since time immemorial and continues to interest contemporary researchers. In modern times, as education was recognized as a means of social mobility; equality of educational opportunity became of particular interest. The concepts involved in this type of discussion are a composite of definition, connotation, perception, and pragmatism. For example, a term such as "equality" is, of necessity, an ideologically charged concept. While the term can be defined within a structured context, it has emotional, awe-inspiring connotations, is perceived differently according to situation and it's meaning may also shift when these situational factors change. The complexity of the term is compounded when it is used to form phrases such as equality of access, equality of opportunity and equality of condition. These phrases are the cornerstones of the accessibility debate. As already mentioned, these terms imply a myriad of meaning well beyond that which any single individual or agency might confer on them. A discussion of the terms will hopefully clarify their usage in this report.

The concepts of equal participation and accessibility have developed in concert with the concept of equality of educational opportunity. Participation rates provide us with a concrete means of measure while accessibility often takes us into the area of conjecture, extrapolation and a multitude of assumptions. In the U.S. annual report, The Condition of Education (1981), the authors state:

> Access to higher education is usually discussed in terms of participation rates since data are more readily available than on access (Dearman and Plisko, 1981, p.225).

The terms are, however, neither independent or interchangeable; accessibility and equal participation are corollaries of equality of educational opportunity. The concepts embrace a myriad of terms which address themselves to equality: equality of access, equality of participation, equality of results, equality of opportunity or equality of condition. This wealth of meaning attests to the dynamic nature of the concepts involved.

In order to understand these terms associated with equality of educational opportunity, one must understand the accompanying perceptions. These controlling perceptions appear to be of two orders, one based in ideology and the other in policy. Ideological perceptions pertain to theoretical concepts and beliefs, while policy-planning perceptions pertain to those views held by policy decision makers.

For example, one definition states that "accessibility is defined as equal participation rates for all groups in society." (Paul Anisef, 1982, p.1). This definition makes certain assumptions about what is possible and feasible. In this conception of equality, access is considered to be denied "if participation is unequal between members of two groups or if some students find it harder to make use of equal opportunities than others." (Martin Kramer, 1980, p.241).

In Martin Kramer's (1980) perception of the terms and their relationship, equal educational opportunity is an "offering" and participation constitutes acceptance of that offer. Thus, accessibility is the combination of offer and acceptance. Kramer places an interesting qualifier on this definition.

> It is one thing to make organized arrangements to offer opportunities and to equalize the terms of offers to individuals, and another thing to induce individuals to make equal use of them... "Opportunity," therefore, seems the better concept to focus on (Kramer, 1980, p.241).

These perceptions reflect the variance in interpretation of these terms. James Coleman's (1966) discussion of equality of educational opportunity views the ideal state of affairs from an equality of results perspective. That is, it is insufficient to offer an equal chance; one must ensure that the results of this "chance taken" are equal. Although James Coleman is referring to secondary schooling, his equality of results perspective has been applied to post-secondary education as well. Regardless of the perception one applies to these terms, present day post-secondary systems cannot possibly be credited with achieving complete equality of results.

Thus, this term must be used sparingly when describing the merits and accomplishments of the system. Depending, again, on one's perception; equality of results may not be a feasible or realistic objective. In an ideal world, everyone has a chance to access post-secondary education; everyone does, and they all benefit equally from this education. In the complex and often unfair world of chances taken and chances missed, there is a great deal of variance in successes. As Martin Kramer (1980) states:

> It has become fashionable to discount the importance of equality of opportunity because it cannot reasonably be expected to lead directly to equality of results among individuals, that is, equalities of status and other rewards, such as income and wealth. The differences between individuals and their life histories will always mean different results, even with equality of educational opportunity. But, what higher education can do should not be slighted because it cannot overcome all the factors that lead to differences of outcome (Kramer, 1980, p.247).

It appears then, that the notion of equality is at the root of the access question. The question remains though: what degree of equality is possible within the context of society and those charged with governing that society? There is no assurance that progress toward equality of access would lessen inequality of condition. The former enhances fairness in the contest of social position but it does not significantly lessen the equality of condition; it may simply allow for rearrangement of the distribution of population. Furthermore, it is possible that equality of opportunity and equality of access cannot and should not mean equal results. It denies individual differences and the pluralism which exists in Canadian society. Equality of opportunity does not mean that upon concluding one's education all arrive at the same finish line, at the same time. Equality of opportunity does mean that each individual has the opportunity to be admitted to some institution in the post-secondary system and to pursue their goals as far as their abilities and desires permit them.

It should be noted that there is a great difference between the questions: why aren't students qualified to enter post-secondary education and why some qualified students don't enter post-secondary education? In regard to the former, the fact that some youths are unable to complete their secondary schooling is regrettable but it is difficult to argue that it be considered the responsibility of post-secondary institutions. It is also not the responsibility of those involved in post-secondary education to interfere in the choice between labour force participation and post-secondary choice. At a CMEC conference held in Toronto in November 1982, The Hon. Dr. Bette Stephenson, Ontario's Minister of Education, made the following remark in reference to the decision to participate in the labour force: "This decision is no less valid; provided it is an informed decision, one that is made after the student has been made aware of the broad range of options open to him or her". (CMEC: 1982, p.251).

Thus, a further dimension is added to the concept of educational opportunity, the choice between accessing post-secondary training and foregoing that choice in order to enter directly into the labour force.

In view of these widely varied perceptions surrounding the issue of educational opportunity, it may be useful to provide some workable definitions of accessibility and participation, as a point of reference for this report. In Who Doesn't Get to University ... and Why, Robert Pike (1970) provides a contemporary view of accessibility.

> The concept of accessibility along with the concept of equal educational opportunity simply advocates the removal of those social, economic and psychological barriers to the development of abilities, which may inhibit a child from achieving or desiring to achieve, the highest educational level of which he or she is inherently capable (1970, p.3).

In Alberta, equity of educational opportunity may be defined as providing post-secondary opportunity to all those qualified and motivated to attend, regardless of financial capacity. Thus, the offer is clear. What remains is reciprocity on the student's part.

III. LITERATURE REVIEW

1. INTRODUCTION

The background to a study of this nature can involve two types of preliminary research. The first type involves a survey of existing literature on the topic. This may include either historical background or original research. In the case of the participation study the literature review includes both an examination of the history of accessibility, and a survey of studies pertaining to barriers to participation. The second type of preliminary research involves placing the research topic into a contemporary context. That is, a literature review may attempt to describe the policy context, the socio-political atmosphere in which the study was performed. This section of the report attempts to integrate both the political and historical context of accessibility. The first section traces the historical development of the concept of equality of educational opportunity and accompanying educational policy developments. The second section describes the history of the Alberta post-secondary system and the implementation of provincial policies affecting accessibility. The third section of the literature review is comprised of a survey of accessibility studies pertaining to the socioeconomic background, sex, geographical location and ethnicity of post-secondary age youths. It is hoped these reviews will serve the purpose of providing a context for accessibility as well as supplementing the findings of this report.

2. HISTORICAL DEVELOPMENT OF PHILOSOPHY AND POLICY

In Educational Opportunities and Political Realities, Frank Bowles (1965) observes that the topic of access to higher education has two sets of associations. First, it is associated with the notion that every person should have an opportunity for education commensurate with his/her abilities. Secondly, it is associated with the consequences of educational policies of a given society. Thus, the realization of equality of educational opportunity in any society depends upon two factors: the philosophical precepts held to be true by that society and the educational policies of the governing bodies. The policies involve a set of judgements as to who is considered educable, education as a right or privilege, and the responsibility for the provision of this education. The historical development of these judgements and the attendant concepts may be examined in terms of pre-industrial, industrial, and modern periods. Further to that, we will examine the contemporary debate surrounding accessibility.

James Coleman, author of Equality of Educational Opportunity (1968) suggests that equality of educational opportunity had no relevance in pre-industrial society because a child's education or training was merely whatever seemed necessary to maintain a family in a rural economy. Most of the populace was considered to be uneducable, save for top-ranking religious and political figures. Similarly, public policy regarding education was nonexistent, being restricted as it was to matters of war and commerce.

Under the pressures of new religious movements, institutionalized commerce and mechanized industry, the demand for an educated populace increased during the industrial period. This change in employment demands required skills which the family could not provide; and increased participation in public affairs made basic literacy more important. The sector of the population considered educable or deserving of education greatly increased during this period. While higher education was still the province of the elite, a minimum of formal schooling was gaining prominence as a "right" of the populace. This represents the attitude of leaders during this period; the need for a more skilled labour force necessitated an education policy. The philosophical precept underlying this period was that an individual's aptitudes correspond to the caste or social class in which he/she was born.

For the purposes of this discussion, the "modern" period in the development of equality of educational opportunity extends from World War I onward while the "contemporary" period within that period extends from the 1960's to the present day. These prescribed boundaries should not be taken too literally since many traditional or "modern" attitudes prevail in contemporary educational philosophy and others outlived their relevance in short order. A brief overview of the modern period does, however, establish a basis for the reaction and change which was to follow in the 1960's.

James Coleman (1968) describes a philosophical conception roughly corresponding with the modern period, with respect to the American elementary-secondary system.

> In the U.S., nearly from the beginning, the concept of educational opportunity had a special meaning which focused on equality. This meaning included the following elements:
>
> 1. Providing a free education up to a given level which constituted the principal entry point to the labour force.
>
> 2. Providing a common curriculum for all children, regardless of background (1968, p.6).

Coleman's remarks contain basic assumptions regarding the provision of equality or equity of participation in what is designated here as the modern period. This concept of equality of educational opportunity assumes that opportunity lies in exposure to a given curriculum. Coleman states:

> The most interesting point about this assumption is the relatively passive role of the school and community, relative to the child's role. The school's obligation is to "provide an opportunity". The obligation to "use the opportunity" is on the child or the family, so that his role is defined as the active one and the responsibility for achievement rests with him (1968, p.7).

Coleman's remarks describe the educational policy operative in this period. Educators and government agencies alike assumed a passive position with respect to the provision of educational opportunity. The underlying philosophical precept of this policy has been described by one commentator as a sort of social Darwinism.

> Everybody in the jungle (or in society, or in school) was to be treated equally as one standard, one set of books, one fiscal formula for children everywhere, regardless of race, creed, or color. Success went to the resourceful, the ambitious, the bright, the strong. Those who failed were stupid or shiftless, but whatever the reason, failure was the responsibility of the individual (or perhaps his parents, poor fellow) but certainly not that of the school or the society (Peter Shrag, 1970, p.70).

The realization that the relationship between school and student might be considerably more complex provided the impetus for an extensive reappraisal of the concept of equity of educational opportunity in the contemporary period.

Renewed interest in the field of equality of educational opportunity in the last two decades may be attributed to academic, societal and economic forces. Academically, one must note the landmark scholarship of such individuals as James Coleman and John Porter. Societal or political influences such as student activism and the civil rights movement were reflected in a renewed concern with equality and education opportunities. The perception of students as "human capital" and thus, factors in economic development, was also a powerful influence on the accessibility debate. This is also the period in which equality of educational opportunity at the post-secondary level came into sharp focus. As well as a growth in the desired level of education there has been, over time, a shift in the assignment of responsibility for this education. The responsibility for providing equal opportunity has shifted from the family to the state and, more recently, from the individual to the system. The nature of this accountability is a primary concern of contemporary studies.

According to James Coleman (1968) the development of educational opportunity has taken place in three stages. The first stage was the notion that all children must be exposed to the same curriculum in the same school.

The second stage assumed that different children have different occupational futures and that equality of opportunity required providing different curricula for each type of student. In the third stage equality of educational opportunity depends in some fashion upon the effects of schooling.

Paul Anisef (1982) describes this last shift in focus.

> With systematic social research after 1960 came the recognitition that the real problem was how to bring about more equality of academic performance. Exposure was not enough. Schools were seen as responsible for equalizing educational results. Thus, the effects of schools in producing comparable cognitive and achievement performance became the focus of equal educational opportunity (1982, p.7).

This renewed academic interest in educational equality was accompanied by an explosive growth of facilities in the post-secondary system. This growth was particularly remarkable in terms of the non-university post-secondary sector. The American committment to increase post-secondary opportunity was largely realized through the creation of publicly supported community colleges offering a diverse mixture of academic, vocational and technical courses. U.S. figures show that community college enrolments increased ten-fold between 1960 and 1980. In Access to Opportunity 1905-80 Berghofer and Vladicka document a similar trend in the Alberta post-secondary system. Low participation rates among socially disadvantaged groups were expected to increase dramatically due to expansion in this sector of the post-secondary system.

It seems, then, that the ideals of equality of educational opportunity had been realized, at least in theory. All people were to be considered educable. Failures to achieve educational goals which had previously been considered inadequacies of the individual were now acknowledged as shortcomings of the social and educational system. Potential students faced a broader range of opportunities due to the growth of facilities. There was an accompanying shift in expressed beliefs in post-secondary education, from that of privilege to that of right. The philosophical precept of the period proclaimed "education for all"; the policy response was to provide facilities, programs and initiatives enabling everyone to access the common good.

It is inevitable that a participation study should be put in the context of the contemporary debate surrounding accessibility; a debate which consists of some old arguments revisited in new forms, and several new propositions. As already discussed, accessibility is a delicate and multi-faceted concept. As well as being sensitive to this kind of interpretation, the policy and practice of accessibility is subject to the scrutiny of public interest and debate.

Some of the current discussions which affect accessibility are: the plurality of the post-secondary system; the market value of post-secondary education, the quality of education and the value of accessibility as a policy and an ideal.

There is a pervasive attitude among some post-secondary education observers which presupposes that equality of educational opportunity exists only if everyone is able to access a university education. This becomes problematic in a society which has promoted significant expansion in the non-university sector during the last decade. The plurality of the post-secondary system and the relative "value" of the different sectors has developed into a rather spirited discussion. Some critics would argue that a student has not really enjoyed full accessibility if he or she has enrolled in the college sector rather than the university sector. This type of hierarchy, with non-university institutions classified as "second-best", is contrary to the diverse policies which have been tailored to a diverse society. Leland Medsker discusses the problem in The Global Quest for Educational Opportunity.

> Whenever new institutions are created to promote diversity, two problems almost inevitably emerge. One is the complex of assumptions about prestige which relegates institutions other than universities to inferior states. The other is that institutions submit to the pecking order tendency and over time try to emulate those they perceive as being higher in the order... . The most important consideration is that diversity be afforded and that as much as possible be done to dignify all segments of the post-secondary system (Medsker, 1972, p.75).

In her address to the Council of Ministers of Education conference in November 1982, the Hon. Dr. Bette Stephenson, Ontario's Minister of Education, reiterated similar views when she stated, "I worry, too, about the perception of many of those at this conference that there is a hierarchy of post-secondary institutions, with universities at the top" (Stephenson, 1982, p.4).

Equality of opportunity of access can and should mean different opportunities within a differentiated post-secondary system - a system offering different types and levels of education, starting points and outcomes.

This orientation presupposes that Canadian society is pluralistic and heterogeneous and that its citizens have a diversity of learning needs. A pluralistic society is well served by a pluralistic education system. There appears to be no intrinsic merit in seeking a singular pattern - namely that of university attendance. In fact, this pattern of thought could prove detrimental to both potential students and the country's economic development.

Perhaps the most controversial debate surrounding accessibility is the contention that the trend toward universally accessible university education may be adversely affecting the quality of that education. One facet of accessibility policy involves promoting participation among groups who may have experienced disadvantaged secondary schooling by attempting to ease their admission into post-secondary institutions. It has been suggested that this may downgrade the quality of education offered. Desmond Morton (1983), of the University of Toronto, suggests that "such students exact a heavy price from conscientious professors and even more, from brighter fellow students." He goes on to state that "good natured arguments that everyone should have a chance or two at a costly but inappropriate education are no longer relevant." (Morton, 1983, p.15).

Roger Gaudry, speaking at the CMEC conference, made the following remarks with respect to the university system:

> In Canada, as in many other countries, we have seen a real effort to democratize higher education, with admission policies which are often not compatible with what I consider to be the real role of the university (Gaudry, 1982, p.5).

At the same time, these arguments are reviewed unkindly by other professionals in the field of post-secondary education. Christine Tausig, quoting Paul Anisef in the CAUT Bulletin (December, 1983) stated:

> The dichotomy between quality and access is a red herring. Decreasing access will not increase quality. The two shouldn't be interconnected.... In fact, increased access makes the university a more interesting place, more reflective of society.... You could see that as a contribution to quality of education (Anisef, 1983, p.2).

The debate over quality of education versus accessibility has recently been brought into sharp focus by higher enrolments, quota programs and fiscal restraint experienced by many institutions. These concerns have a tendency to surface when systems experience stress.

Since promoting accessibility through the removal of financial barriers has attendant costs, it is not surprising that it has many detractors in unstable economic times. This is related to one of the other criticisms levelled at the post-secondary system. The market value or economic relevance of post-secondary education is presently being re-examined. The uncertainties of the current economic situation have cast some doubt on the forecasted needs for a highly specialized labour force. This, in turn, has implications for the policy of accessibility, with some questioning the economic value of participating in post-secondary education.

By comparing the relative income levels and unemployment rates of graduates to those with lower educational attainment levels, it is sometimes argued that the market value of post-secondary education is not sufficient to balance the costs of obtaining that training. The methods of measuring this comparison and the results of this measurement are matters of much debate. For example, Laura Selleck (1980), in The University Graduate and the Market Place provides evidence that negative assumptions regarding university graduate employment are invalid and unwarranted.

> Although, between 1960-75, Canada outpaced every other country in terms of growth in the 15-24 age group, it did not experience excessive rates of youth unemployment relative to other industrialized nations during the seventies (Selleck, 1980, p.3).

Similarly, Patrick Carnevale, in his article entitled "Higher Education's Role in the American Economy" in Educational Record, states:

> The economic case for higher education begins with the assumption that people and their talents are critical factors of production... As the eighties begin, it is apparent that the single driving force available to justify national resource committments to any institution, public or private, will be the prospective impact on the nation's overall economy (Carnevale, 1983, p.9).

Thus, it is more important now than ever that people are educationally prepared to deal with a changed economic and social context.

Dr. Edward Harvey discusses this issue in his article "Higher Education in the Sixties."

> Higher education serves three vital goals in society: economic development, provision of equality of opportunity and general cultural development. As the earlier discussion of the costs and benefits of education suggests, the relative primacy of these goals shifts during different historical periods. If certain forms of higher education are now less clearly linked to economic development and heavy public subsidies are therefore less justifiable; what consequences would resulting cutbacks have on these other goal areas? How does one measure the relative benefits of equality of opportunity or cultural development versus economic development? (Harvey, 1976, p.46)

All of these arguments seem to suggest that accessibility, as a policy and ideal, may be at a critical juncture and may require some rethinking in the decade ahead.

John Porter, author of Does Money Matter, makes this statement about the future of accessibility:

> The case for accessibility still stands. It is, however, a policy which is expensive from the social as well as the individual point of view and which can lead to the better off being over-represented, resulting in a subsidization of those who have more resources by those who have less. For the less well off there always will be financial hazards which in turn dampen enthusiasms or reduce inclinations to stay in the educational streams. It is not sufficient then simply to provide accessibility and opportunity and to make money matter less than it did formerly. It is also important to know something about the range of attitudes and values which mould aspirations to take opportunity when it is provided and to locate these socio-cultural milieu where educational aspirations and expectations are limited (1979, p.xvii).

K. Patricia Cross (1977) expresses the same concern for the future.

> The social inequities that propel egalitarianism are far from resolved, and the drive for equality through education will no doubt continue to be a compelling force for change in higher education. But these problems can no longer be addressed through quantitative changes - more degrees for more people. They will have to be approached through changes in the kind of education offered (1977, p.11).

Cross (1977) argues that future demands cannot be met by increased enrolments or increased course content. She calls for the "abandonment of mass approaches that assume students can be batched in groups and processed through a standard pipeline designed for some mythical average student" (1977, p.112). Cross's view of the future is provocative indeed. She states:

> Learning for the individual will be the measure of education, and it will not be long before we can demonstrate that individualization is more cost effective than the mass approaches that aim for the center but miss most of the target (1977, p.112).

3. POST-SECONDARY EDUCATION IN ALBERTA: A POLICY PERSPECTIVE

3.1 Introduction. The concept of educational opportunity in the western world has evolved in concert with economic and social changes. Alberta is no exception to this trend. The shift from a predominantly agrarian society to a resource industry economy has affected the development of the post-secondary system.

This development has taken place in three phases, each one successively closer to the ideal of equal participation. The first and formative stage established the framework of the system. This initial stage was followed by two movements which have taken place in tandem. A period of large-scale physical expansion which gained momentum in the 1960's accommodated dramatic enrolment increases in all sectors. In the 1970's the system has seen a marked trend toward decentralization and innovative program development. These policy directions are not entirely distinct; concern with special educational groups was manifest during the sixties and capital expansion has continued through the seventies. They are, however, indicative of the general direction taken by post-secondary education throughout western countries in contemporary times.

In an attempt to describe the state of post-secondary participation in Alberta the paper will discuss three areas: a) the early history of post-secondary education, b) the physical expansion of the system, and c) specific program developments initiated to accommodate special groups. The primary source for this analysis will be Access to Opportunity 1905-80 by Desmond Berghofer and Alan Vladicka (1980).

The early development (1905 - 1917) of Alberta's post-secondary system was highlighted by the establishment of the University of Alberta in Edmonton and the Institute of Technology and Art in Calgary. Even in this formative stage, decentralization was a key policy, which became operational with the establishment of several teaching colleges and agricultural schools outside the major centres of Edmonton and Calgary. The private colleges which came into being at this time, largely as a result of religious organizations, were to form the basis of Alberta's college sector. By 1916, there were fourteen post-secondary institutions in Alberta.

The period between 1917 and 1939 was distinguished by two disparate movements of prosperity and depression. These economic situations were reflected in the post-secondary system. The twenties were characterized by increasing enrolments, steady expansion in teacher and agricultural training and growth in facilities in the university sector. The depression of the 1930's was manifested in economic and governmental retrenchment across the system. By 1939 the province's post-secondary system was characterized by a centralized university, a centralized technical institute and several agricultural schools, normal schools and private colleges.

World War II and the accompanying social change acted as catalysts for the further development of Alberta's post-secondary system. Sudden and dramatic increases in population and prosperity led to an increased demand for post-secondary education. A burgeoning industrial/urban movement in Alberta began to overtake agriculture as an economic focus. A broader tax base and increased federal involvement in education enabled the government to make changes concurrent with these new demands. This period (1939 - 1956) witnessed the establishment of the Dominion Provincial Student Aid Program (1939) and the Alberta Student Assistance Program (1953), continued expansion of facilities and increased federal involvement in technical education. Teacher training was professionalized during this era while agricultural training suffered some setbacks due to declining enrolments, the trend towards urbanization and the increased cost of setting up a farm. Three major policy directions gained prominence during this period: decentralizing educational services, broadening the range of programs provided by the system and easing access to educational opportunity. These trends proved to be the molding forces of contemporary post-secondary education in Alberta.

3.2 Expansion of the System. As Alberta's industrial and social development continued to accelerate through the sixties the post-secondary system underwent a similar transformation. Steady growth in student numbers provided the impetus for the physical expansion of the province's network of institutions, with new facilities for existing schools as well as the creation of entirely new campuses. The significance of this expansion with respect to increasing participation was that the system was able to accommodate an ever growing student population in a variety of fields.

Perhaps the most significant development of physical facilities took place in the public college sector. Growth in this area was planned with the goal of "relieving enrolment pressure on the university and expanding non-university educational opportunity" (Berghofer and Vladicka, 1980, p.25). While the physical aspects of development were well underway during the sixties the system's philosophical constructs were somewhat unstable. A Special Study on Junior Colleges, commissioned in 1965, concluded that both technical/vocational and university courses should be part of junior college offerings. Dr. Andrew Stewart, chairman of the study, believed that the primary purpose of the college system should be "to provide a valid alternative to university education for students unwilling or unable to attend university" (Berghofer and Vladicka; 1980, p.25). While the universities and colleges desired to maintain the colleges as university transfer bases, government agencies advised the expansion of junior colleges to include technical/ vocational offerings. The resolution of this issue in favor of diverse programming constituted a major step toward encouraging participation.

Other sectors of the system have been subject to growth and change as well. In 1966 the province granted autonomy to the University of Calgary and, soon afterwards, the University of Lethbridge was created. Both of these institutions have enjoyed considerable expansion in both facilities and programs.

Apprenticeship training programs in Alberta have proven to be one of the most successful examples of meeting increasing manpower demands. Intensified economic growth and a marked increase in construction industry activity have created a demand for a variety of skilled tradesmen. Consequently, training facilities at technical institutes and colleges have been expanded in recent years.

As a result of the Agricultural and Vocational Colleges Act (1967) the province's agricultural colleges experienced a growth in enrolments and a change of identity. In 1970 the term "agricultural and vocational" was deleted and the institutions became simply Olds College, Fairview College and Vermilion College. This sector of vocational training became a focal point of federal and provincial efforts to reduce social and economic inequality. As a result of this joint interest and the subsequent Federal-Provincial initiatives, this period witnessed the introduction of federal training allowances under the auspices of the Occupational Training of Adults Agreement. The Alberta Vocational Centres were established as a direct result of this interest.[1] These measures constituted attempts to reduce regional disparities and to better serve the Native population in that area.

This description of system growth and expansion traces the development of a complete network of institutions and programs complete in Alberta. By the early seventies, however, no comprehensive study had as yet been made of disadvantaged groups and their specific needs, or of possible stress points in the existing system.

3.3 Program Innovation. The advent of the seventies signalled the beginning of a new era in post-secondary education. There was a growing realization in Canada and the U.S. that the relationship between economic growth and advanced education was neither as direct nor as consistent as previously believed. This, and a general downturn in economic fortunes necessitated a more cautious approach to post-secondary education in the seventies. While Alberta was, to a certain extent, insulated from this economic instability, there were other indicators that a change in focus might be warranted. The university sector experienced a decline in enrolments in 1971 for the first time in twenty years. Overall, the size of the 18-24 age group was beginning to stabilize after a period of rapid growth and was expected to decline slightly in the next decade. The large-scale expansion of the sixties provided a firm basis for the system but this type of growth was no longer an absolute priority in post-secondary development. In the seventies, government and other concerned agencies began to examine the composition of the student population. Several areas of concern were identified: rural/urban participation differences, continuing education and education for Native persons. Having increased participation overall, the government was in a position to focus on particular concerns. In general terms, policy objectives in contemporary times have included: removing financial barriers to participation; reducing geographic, age, employment and socioeconomic constraints to participation; and ensuring that the physical capacity existed to meet demand. The public policies instituted to realize these objectives include: student financial assistance support, special grants, research and development support; the coordination of the post-secondary system and the decentralization of post-secondary services. The efforts of government to integrate these policies have resulted in a unique blend of autonomy and interdependence, and of restraint and innovation.

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[1] The Centre at Lac La Biche was forced to close late in 1969 due to federal funding problems and was subsequently reopened in 1973.

Contemporary developments in the system have been facilitated by an extensive overhaul of government coordination and control. The Department of Advanced Education was established in 1972 with the expressed goals of developing continuing education and expanding education opportunity in rural areas. The balance between government control and institutional autonomy emerged as a key issue in contemporary post-secondary education. Several government reports on the subject recommended public control of such institutions, with the eventual result that many of the province's institutions now enjoy a board-governed status.

The government's recognition of the needs of adults who may wish to pursue higher education on a part-time/casual basis resulted in a firm commitment to further education. New funding regulations were established to encourage the formation of further education councils and the development of further education programs. The councils were to coordinate a broad selection of course offerings ranging from credit course to life-enrichment programs. Between 1971 and 1978 the number of Further Education Councils more than doubled and the number of participating adults increased by over five times. As Berghofer and Vladicka state:

> This further education system has significantly expanded the social and geographical accessibility of certain types of higher education in the province but it represents only a beginning in the development of a much broader system of life-long education, the need for which is being recognized in all modern technological societies (1980, p.47).

As well as expanding opportunity for adults, the government sought to improve access for those Albertans beyond commuting distance from a post-secondary institution. The specific recommendations of the Worth Report advocated the development of a distance education system, which "would employ a wide variety of learning media, including television and radio broadcasts, cable vision, correspondence, telephone and tape technologies". (Berghofer et al 1980, p.48). The Athabasca University was granted permanent status as an undergraduate university in 1975. With the aid of correspondence techniques, audio tapes, in-person tutorials and television programs, Athabasca University was equipped to deliver courses in business and administration, social and physical sciences, and the humanities. Enrolments at Athabasca University increased substantially during the seventies, from 150 registrants in 1973 to a total of 4 600 registrants in 1979-1980. By 1982-83, Athabasca University reported over 9,000 program registrations by over 7,000 students.

In 1973 the government established the Alberta Education Communications Corporation (ACCESS). In its responsibility for educational radio and television networks in the province, ACCESS has provided a broad range of informative programming at every level of development from early childhood to further education.

The government expressed a continuing commitment to distance learning through the establishment of The Innovative Projects Fund in 1974. The intention of this fund is to encourage and support projects which have the potential to improve the quality of education within the advanced education system. Some of the research aided in this manner include the development of computer based instructional systems and experiments with the use of advanced communications technology (ie. satellite transmission, television based information systems).

In addition to the implementation of distance learning techniques the continuation of a long-established tradition of decentralization allowed an even greater portion of the population to participate in post-secondary education. In Access to Opportunity Berghofer and Vladicka state:

> Decentralization has been achieved in one of two ways: expanding the range of programs available at existing institutions and encouraging these institutions to extend services on an outreach basis by establishing consortia or satelite campuses (1980, p.50).

Northeastern Alberta has been one of the primary beneficiaries of this type of expansion in the seventies. The reestablishment of an Alberta Vocational Centre in Lac La Biche was of particular importance to Native persons in that area. The course offerings include academic up-grading, clerical, occupational and para-professional programs. In 1975 Vermilion became the permanent campus for the new Lakeland College. This college was to offer vocational, technical, agricultural and some university courses to the surrounding area. The Alberta Vocational Centre at Fort McMurray became Keyano College in 1975 and the programs there include both technical/vocational and university courses. Satellite campuses and consortia development in the last decade have been established in nearly every region of the province. The Old Sun campus on the Blackfoot Reserve established a connection with Mount Royal College in 1972, and in 1979 Medicine Hat College began to extend satellite campus services to Brooks. In the High Level area, services are provided by Alberta Vocational Centre Grouard and by a consortium consisting of Fairview, Grande Prairie Regional College, Athabasca University and Alberta Vocational Centre, Grouard. The Yellowhead region consortium serves Edson, Hinton, Grande Cache and Jasper. In total, there are five consortia in operation in Alberta. The value of this approach in increasing participation is evident; their development has provided a broader range of opportunities to the province's population.

Decentralization has taken place in other areas as well. An amendment to the Universities Act in 1980 allowed private colleges to offer university transfer courses. In this way degree programs have been made accessible in a broader range of locations. Formerly available only in Edmonton and Calgary, apprenticeship training programs were decentralized to public colleges outside of the major centres. The net effect of this trend toward decentralization was, quite simply, that an increasing number of people were able to participate in some form of higher education without the difficulty or inconvenience of moving to a large centre. Berghofer and Vladicka (1980) summarized the effects of this policy:

> ... Decentralization of educational services has taken place through establishment of satellite campuses by colleges and provision of services by individual institutions and consortia on an outreach basis to small communities... Decentralization of post-secondary education was a basic feature of system development in the 1970's and higher educational services have been made accessible, in the geographic sense, to a much broader segment of the province's population (1980, p.50).

As well as lifting some of the geographic barriers to post-secondary participation, much has been done to alleviate financial pressures, a prominent barrier to equal participation. The 1970's brought significant changes in student assistance programs. In 1976, the Student's Finance Board extended the loan system to include loans for students at private colleges and trade schools. The Appeal Board was formed in 1978 in order to serve those students who felt that their financial need had been unfairly assessed. The need for this kind of agency increased as rising tuition fees and changing student aid regulations became features of the post-secondary system. It was inevitable that this would lead to debate between institutions, students and government. This, in turn, prompted the formation of the Task Force to Review Student's Contributions to the Costs of Post-Secondary Education. The subsequent recommendation was that students who must move away from home to attend post-secondary education may require special assistance. In an attempt to alleviate this particular type of financial pressure the government established the Alberta Education Opportunity Equalization Grants. The grants were implemented in the fall of 1980 and provide for awards of up to $1 400/year. In addition to this, Special Assistance Grants of up to $2 500/year were established to aid students who demonstrate greater financial need than the loan system might ordinarily accommodate. Public support to Alberta's students in the form of fellowships and scholarships, loans, grants and remissions, administered by the Student Finance Board, grew from 38.7 million in 1980-81 to a forecasted 56.9 million in 1983-84. Furthermore, the number of students receiving financial aid increased from 14,300 in 1980-81 to 38,000 in 1983-84.

Finally, special financial assistance was made available in the form of scholarships. The $100 million Alberta Heritage Scholarship Fund was established in 1980 to reward excellence in a variety of fields and at every levels of post-secondary education, as well as to prospective post-secondary s[illegible] the province's high schools.

The development of equity of educational opportunity as a philosophy and practice has reflected the needs and desires of the population throughout the province's history. Post-secondary participation has been facilitated by both expansion of facilities and innovative program development. The success of these measures is reflected in system-wide enrolment statistics. Registrations in Alberta's post-secondary system rose to over one-half million in 1981-82. Like most post-secondary systems and most contemporary societies, many specific educational needs remain which have yet to be addressed and fulfilled. Progress has been made, however, toward establishing a post-secondary system which has the potential to serve all those who desire to participate.

4. FACTORS AFFECTING POST-SECONDARY PARTICIPATION

4.1 Introduction. In Social and Academic Factors in the Career Decisions of Canadian Youth, Raymond Breton (1970) describes some of the issues which confront youth with respect to education and work.

> Career development is a complex process. It involves both subjective issues related to ourselves as individuals - such as the crystallization of identity, as well as the objective dimensions inherent in the surrounding socio-economic environment. This process is complex, not only in its psychological implications and diversity of practical influences and exigencies but also in the interplay of the two sets of phenomena. Finding our own place in the occupational structure and in the stratification system, therefore, is like an elaborate game of individual and social leapfrog in which events, opportunities, obstacles and socio-economic circumstances are internalized, therefore, modifying perceptions, attitudes and values. In brief, the individual's orientation to education, career and life generally, as well as the practical plans and actions he takes - or does not take - to realize his life chances are both a product of, and depend upon, the way in which he integrates, or fails to integrate - these subjective factors and objective circumstances (1970, p. 3).

These subjective and objective factors, in all their complexity, form the basis of accessibility and thus, equal participation in post-secondary education. Since accessibility relies more heavily on attitudinal factors and familial influences, any assessment of their influence fast becomes bewildering and uncertain. Survey research has, however, identified several variables which affect participation. These include: family-related variables, geographic variables, ethnicity and gender. The background research for this study involved the review of a number of studies which relate specifically to the socio-economic background, sex, ethnicity and geographic location of the prospective or actual post-secondary student. The approaches used in the studies varies greatly, in both method and presentation. While some studies present pure participation data, others attempt to assess more transient variables such as attitudes, aspirations and expectations. Although there is an inherent difficulty in presenting these inconsistencies, there is also great value in providing a broad picture of student choice in both potential and realized terms.

The review comprises five major sections. The first section reviews studies which relate to the socioeconomic background of the potential student. This section also deals with the question of student aid and its perceived influence on student choice. The second section presents studies which focus on gender differences in post-secondary participation and educational attainment. The community of residence of the potential student, or rural/urban differences in educational attainment is the focus of the third battery of research. The effects of ethnicity on educational aspirations comprise the fourth section. The fifth and final section deals with mature students, as age has more and more become a factor affecting participation. This survey of research findings includes American and Canadian studies. While the two educational systems are not identical, the conclusions of American studies are often applicable and relevant to the Canadian situation. In the final analysis, the conclusions reached in these studies have some bearing, at least in part, on the contemporary educational scene and give some indication of participation trends in other studies. There is no attempt made here to validate or oppose the variety of viewpoints but the review may serve as a basis for further discussion.

4.2 Socioeconomic Background. Socioeconomic background has been cited by many studies as the single most powerful influence on the education and career choices of a potential student. Parental education, parental occupation and family income which constitute a child's socioeconomic background provide both subtle and self-evident influences on his attitudes and beliefs. There is the more tangible factor of the amount of money available for an education and more subtle factors such as role modelling. The studies surveyed attempt to examine this range of influence.

1. John Porter's landmark study, The Vertical Mosaic (1965) attempted to identify and describe the Canadian class structure. As a portion of this exhaustive study, Porter analysed the social class origin of approximately 8 000 university students. He discovered that students from families in the top four Blishen occupational scale classes were over-represented (in relation to their population) in university while those from the lower three classes were vastly under-represented at the university level. Similarily, students from more highly educated back-

grounds and higher income families were over-represented in comparison to their peers from lower-income, lower educational status backgrounds.

2. In Social and Academic Factors in the Career Decisions of Canadian Youth, Raymond Breton (1970) presents the results of an extensive survey which attempted to clarify the school's role in career decisions. Breton found that socioeconomic origin was closely related to aspiration for education. According to his findings, approximately 14% more students from high socioeconomic status (SES) backgrounds, compared with those of low status, intended to complete high school. Moreover, 12% of this smaller group had plans to enroll in post-secondary institutions.

3. In Factors Affecting College Attendance, Christiansen, Melder, and Weisbrod (1975) based their study on data collected from 440 high school seniors from selected Wisconsin cities. The study considered three factors which are believed to affect a potential student's decision to enrol in post-secondary education: high ability, the cost of attending college, and the socioeconomic status of his/her parents (family income, father's education, parental education). The results of the study indicated that ability and socioeconomic background were strong and consistent influences on the probability of attending post-secondary education. Among the socioeconomic variables family income appears to have been the least important factor of influence. The level of the father's education was the socioeconomic variable most highly correlated with college attendance.

4. The Federal-Provincial Task Force on Student Assistance (1981) was established to review federal and provincial student assistance programs with respect to their adequacy, objectives and possible modifications and alternatives. The Task Force reported that student aid does seem to be distributed across income groups, and they cite an inverse relationship between the gross income of the parents and the amount of aid received by students in 1978-79. The report warns, however, that there is little evidence to suggest that student aid programs "are important instruments either in encouraging those students to make the original participation decision or in preventing lower income students from dropping out once

enrolled" (1981, p.97). The results demonstrated that financial aid appears to be evenly distributed between males and females, and rural and urban students. The Task Force's appraisal of the effect of student aid in influencing student decisions may be stated as follows:

> Participation decisions are not very sensitive to changes in student aid programs and, consequently, student aid programs are not powerful tools for increasing participation (1981, p.106).

5. In Does Money Matter?, Porter et al. (1979) presented the results of a survey of 9 000 Ontario high school students and 3 000 parents. The study examines the impact of such variables as social class, sex, family size, measured intelligence and school performance on the educational aspirations and expectations of Grade 8, 10 and 12 students. The study reveals a striking linear relationship between social class and level of educational aspirations and expectations. The authors found that low-ability, high SES students may be more likely to attend post-secondary studies than high ability, low SES students. While the authors concede that the relationship between socioeconomic background and educational aspirations is not easily understood, they argue, "To say that the reasons for lower educational aspirations among lower class children are complex does not mean that financial barriers are not important" (1979, p.58).

4.3 Gender Differences in Post-secondary Participation. The advances made by the suffragettes, the economic and social changes incurred by two world wars, and the rise of feminism as a political movement have brought concerns over sexual equity to the forefront in both public policy and popular consciousness. With respect to post-secondary education, the situation is both encouraging and confounding. The studies reviewed below present evidence of both these trends.

1. In Some Characteristics of Post-secondary Students in Canada (1976), some general trends with respect to female participation in post-secondary education are described. The report notes that while more females than

males graduate from high school, females are less likely to continue their studies at the post-secondary level. Participation patterns demonstrate that females are under-represented in graduate and in professional programs but comprise high proportions of community college enrolments. In part-time studies, females outnumber their male counterparts. The study suggests that since "part-time students are generally older, this suggests that females tried to make up later in life for educational opportunities they had missed earlier". (Secretary of State, 1976, p.30).

2. In Sex Discrimation: Access to Post-Secondary Education, Helen S. Astin et al (1976) present the results of a study which attempted to identify the extent and types of sex discrimination in access to post-secondary education. The study determined that as the educational level rises, the proportion of women enrolled decreases. Overall, the college enrolment of women was found to have increased dramatically between 1964 and 1974, nearly doubling during the period. Women were found to be drastically under-represented in institutions of technology and engineering. In the post-secondary non-university sector, women were found to be clustered within a disproportionately narrow range of vocational fields. The authors state that their analysis did not indicate to them whether the causes of this under-representation lie with the institutions, society or women themselves.

3. In Education and Job Opportunities for Women: Patterns of Enrolment and Economic Returns, Jane Gaskell (1981) utilized Canadian data to examine educational attainment and employment of females.

   In her examination of women's attainment levels Gaskell states that while women are more likely to graduate from high school, and with higher academic grades, they are less likely to participate in post-secondary institutions. Women constitute a higher percentage of the enrolments in community colleges but are outnumbered by males at the undergraduate and graduate levels of universities. Over time, the number of women enrolled in post-secondary education has been steadily increasing, except for a slight decrease in the 1950's.

Gaskell describes evidence of sex-segregation at the post-secondary non-university level. In 1979, women constituted 99% of the enrolment in secretarial courses, 87% of the enrolment in medical programs and 65% of those in community and social services. The low rate of female participation in traditionally male-dominated fields is evidenced by their enrolments in electronics, mechanical engineering and aeronautical engineering (2% of total enrolments), natural resources programs (24% of total enrolments) and other engineering programs (14%). In arts, women constituted 58% of the enrolments and 48% of the enrolments in business programs. Gaskell points out that women's overall representation in business programs conceals segregation according to particular course. While males tend to be concentrated in financial management and marketing management, females tend to choose retail merchandizing as a specialization.

This difference in choice of field of study is also in evidence at the university level. Women constitute more than 90% of the enrolments in home economics, nursing, rehabilitative medicine and secretarial science; over 70% in library science and social work; over 60% in education and the fine and applied arts. Women are least often found in the faculties of engineering, forestry, dentistry, architecture, and religion.

Gaskell observes that the proportion of women in most faculties has increased, and that their increased participation in law, architecture, medicine, dentistry, agriculture, veterinary medicine, and commerce is encouraging. The only traditionally male-dominated fields where Canadian women are not increasing their representation faster than in the university as a whole are engineering and religion.

4.4 Geographic Location and Post-Secondary Participation. The geographic location of a potential student is defined in terms of size of community of residence and rural/urban classification. The nature of this environment is believed to affect post-secondary plans and decisions. First of all, these choices may be influenced by the student's proximity to a post-secondary institution. That is, students may be more likely to enroll in post-secondary education when an institution is located in the immediate vicinity of their home than when it is located in an area beyond commuting distance. The size of a student's community is also thought to affect aspiration and expectation of post-secondary attendance.

1. In Does Money Matter?, Porter et al. (1979) divided their sample survey population into four categories on a rural/urban scale. These strata included: Toronto metropolis, major urban areas of 100 000 or more, minor urban areas (10 000 - 100 000) and rural area communities of less than 10 000.

   The study revealed important differences in aspiration between rural and highly urbanized areas. Approximately 42% of the surveyed metropolitan students expressed a desire to graduate from university compared to 27% of the rural students. The results showed very little difference in aspiration between the students in the Toronto megalopolis and other major urban centers. There was, however, a difference between the second and third categories of urbanization with the third category bearing more similarity to the rural category, in terms of aspirations and plans.

   When cross-analysed for social class, the study revealed that level of aspiration decreased as level of social status decreased and that aspirations were lower for the rural end of each of the social strata at all grades. The exception to this was that the level of aspiration among high SES groups was high regardless of level of urbanization.

   The authors conclude:

   > It is clear from our analysis that urbanization is related to educational aspirations. The break between the two ends of the continuum seems to come at the point of small cities or towns where young people have, compared to their more urbanized fellows, limited educational horizons (1979, p. 53).

2. In Some Rural-Urban Differences Between Manitoba High School Students, Leonard B. Siemens and Leo Driedger (1965) attempted to identify and explain significant differences between farm, rural non-farm and suburban youth. The sample was comprised of 1 844 high school students from both suburban and rural backgrounds. The study attempted to test three hypotheses:

   (a) the more urban the youth the greater their exposure to a diversity of social experience;

   (b) the more urban the youth the higher their motivations, and

   (c) the greater the exposure to a diversity of social experience, the higher the motivations (1965, p.6-7).

   The results demonstrated a strong relationship between type of residence and the selected factors. Farm youth tended to be of lower economic status than suburban youth, less exposed to information, communication media, and less mobile. Generally, farm parents had acquired less education and suburban parents more, while rural non-farm parents ranked between these two. Suburban and rural non-farm youths reported more consistent work away from home and more paid summer employment. The study concluded that the more urban the residence of youth, the greater the exposure to a diversity of social experiences.

   With respect to motivational factors (ability, self-concept and aspirations) the study found more evidence of the relationship between community of residence and student plans for continuing education. The data demonstrated that youths from suburban-type residences tended to score higher in aptitude measures and high school marks than youth from farm type residences with a variation in the rural non-farm group (higher than farm youth in aptitude measures and lower on school marks). With respect to self-concept (self-assessed leadership ability), farm youth rated themselves less than average twice as often as urban youth, while suburban youths rated themselves above average twice as often as rural youth. A large majority of all the students rated themselves average in leadership ability.

Two-thirds of the suburban youth held high educational aspirations to attend university. Approximately one-third of the farm youth aspired to a university education, but more aspired to enter vocational training. The study suggests that farm youth may be interested in education that is more directly related to work.

While the authors state that their study cannot conclusively demonstrate the hypothesized relationship between social exposure and motivations of students, they conclude that there are significant associations between the two.

3. In Post-Secondary Aspirations of High School Seniors From Different Social-Demographic Contexts, G. Patrick O'Neill (1981) examines what effect the size of community of residence has on levels of occupational and post-secondary aspirations among Grade 12 students from 5 district social-demographic settings. The sample was comprised of 750 high school seniors in the Durham Region of Ontario.

O'Neill's categories included: rural farm, rural nonfarm, village (less than 1 000 population), small town (1 000 to 10 000), and large city (50 000 to 150 000), and his study examined variables of mental ability, socioeconomic status, sex, school peer group, parental expectations, family size, family position and citification. Residential locale was considered independently of these other variables.

Levels of educational aspiration were rated as high, medium, or low. A university choice was given a high rating. Medium rating was given to an undecided university choice or a diploma-granting college choice. Apprenticeships, college undecideds, and a lack of post-secondary aspirations were given a low rating.

Results of the study reveal the effects of residential locale on each of the dependent variables. Levels of educational aspiration were found to be in this order: small-town, rural nonfarm, city, rural farm, and village. Although city students ranked first on occupational aspiration, small town and rural nonfarm students both ranked second; rural farm students were third and village students were fourth.

While other studies have found a direct relationship between aspiration level and size of community of residence, O'Neill's results were somewhat different. Rural non-farm students, as a group, had consistently higher levels of educational and occupational aspirations than any one of the other groups. Village and rural farm students had consistently lower levels of educational and occupational aspiration than the other three groups.

In his explanation for lower aspirational levels among these groups, O'Neill suggests that "farm children cherish values consonant with country living" (1981, p.61), and thus may not value post-secondary experience as highly as their counterparts. O'Neill suggests this type of explanation might have equal bearing on village students.

> As a group they may identify more strongly with rustic folkways and more than their rural non-farm counterparts....They are permanent, traditional and arcadian. In short, they are countrified (1981, p.62).

O'Neill notes that while the effect of residental locale on aspirations is not statistically large, it did, on the average, contribute more to the variance than any one of sex, mental ability, family size or family position.

4.5 Ethnicity. An assessment of post-secondary participation according to ethnicity is difficult due to a lack of research materials in this area of study. American studies of this nature are not particularly relevant in the Canadian context for two reasons. The American ethnic mosaic is composed of different groups in different proportions. Secondly, the American "melting pot" differs in both philosophy and practice from Canada's cultural pluralism and expressed policy of multiculturalism. While American studies have concerned themselves primarily with Black and Hispanic minority groups Canadian interest seems to have focused primarily on Native Canadians and French Canadians. The concerns of these groups with respect to post-secondary opportunity are of entirely different magnitudes. There appears to be no significant difference in the educational attainment of French Canadians and of other ethno-linguistic European groups in Canada, particularly of those residing outside the Province of Quebec. Native persons, on the other hand, are struggling for equity at the primary and secondary levels of schooling. Research conducted thus far with respect to both of these groups, and other ethnic groups, has focused on cultural problems of assimilation, identity and the political position of these groups in Canada. Very little has been done in regard to their post-secondary experience. The general premise of the selected studies presented here is that ethnic affiliation may affect post-secondary participation in a consistent manner by influencing the aspirations and attainment of prospective students.

1. The Influence of Selected Family Factors on the Educational and Occupational Aspiration of High School-Aged Youth by L. B. Siemens (1965) includes a brief examination of ethnicity as a factor influencing the career plans of youths in a selected Manitoba sample.

   Siemens compared the following ethnic groups: British, German, Icelandic, Ukranian, Russian, French, and other. The results indicated that there were no significant differences in aspiration levels among these groups except for a slight variation among males in each group. The percentage of males aspiring to university was found to be as follows: Icelandic (71.7%), German, British, French and other, Ukranian and Russian (50.0%). Generally speaking, the students of British origin were recorded as having higher levels of aspiration than their counterparts. Of some interest is the fact that while German males ranked second highest in educational aspiration levels, they ranked lowest in occupational aspiration levels, while German females ranked lowest in both occupational and educational aspiration. The study reported a consistently low level of aspiration among high school youth of Ukranian and Russian origin. Siemens concluded, however, that he would reject any hypothesis that educational and occupational aspiration levels of high school males and females vary significantly with ethnic background.

2. In The Relationship Between Ethnicity and Educational Aspirations of Post-Secondary Students in Toronto and Montreal, Ann B. Denis (1978) attempted to determine whether ethnic origin had a significant effect on attitudes and educational aspiration. Denis also examined attitude and aspiration in relation to mother tongue and analysed the results separately for each sex. Her sample was comprised of a group of 1 318 students in their first year at university or college in Toronto and at the English language college of general and professional education in Montreal.

Six ethnic origin categories were analysed: British, French, German, and other north-western European groups; Italian, and other southern European groups; Jewish; Ukrainian, and other eastern European groups.

Only 2% of the total sample had no plans to complete any post-secondary studies and, overall, 65% of the sample stated a desire to complete university.

A slightly higher proportion of men than women hoped to complete a university degree. The percentage of different ethnicities "hoping to" ranged from 58.9% (Italian) to 80.0% (Jewish) for men and from 48.6% (Italian) to 74.6% (Ukrainian) for women. For both, the percentage was lowest for Italians and highest for citizens of Jewish ancestry and Ukrainians. In the case of German students, a higher percentage of women than men hoped to complete university education.

3. The Report of the Task Force on Native Students (1978) attempts to assess the position of Treaty and non-treaty Indians at the University of Alberta with respect to their history, their difficulties and the various special programs in existence. The report also examines the Alberta situation in relation to facilities and programs in other provinces and the U.S.

The report found that Native students are represented in proportions which are entirely inconsistent with their total population in Alberta. The report suggests that the University of Alberta must improve and expand every facet of services offered to Native persons (programming, counselling, financial assistance). The report also advises the cooperation of Native leaders in the coordination of these services.

The report outlines existing programs for Native persons in Alberta and describes in detail their University of Alberta enrolment characteristics. In the fall of 1977, 47 Native students enrolled at the University of Alberta. More than half were enrolled in Education, with the next highest concentration being in Arts. Native studies programs are presently conducted at the University of Lethbridge, Grant MacEwan Community College and at Alberta Vocational Centres. Approximately 112 programs or short courses were offered on reserves, colonies or predominantly Native settlements in 1982-83. These courses and programs included academic upgrading, short courses and driver training. In the Alberta Vocational Centres and Community Vocational Centres the approximate proportions of Native students were as follows: AVC Grouard (70%), AVC Lac La Biche (70%) and CVC's (95%). In 1982-83, approximately 250 Native students on the Blood and Pagan Reserves were enrolled in courses offered by Lethbridge Community College.

It appears that while some progress has been made in the area of Native education, there are still many obstacles in the way of their equal participation in post-secondary education and, indeed, at all levels of the system. The unique concerns of ethnic affiliation are compounded by the socioeconomic background and geographical location of many of these students. When further exacerbated by the complexities of culture and attitude, the provision of equal opportunity for Natives and other ethnic groups presents a considerable challenge.

4.6 Age. Many writers are of the view that adult students will represent an increasingly important source of students for our post-secondary institutions. As the "baby boom" sector of the population continues to age, their needs for recurrent or continuing education will place special demands on institutions. The unique characteristics and concerns of this group deserve careful consideration.

1. The Canadian Association for Adult Education report From the Adult's Point of View (1982) defines "adult" as including all persons beyond the compulsory school attendance age in each Canadian jurisdiction who have interrupted their continuous attendance at an educational institution for a significant period. In the summer of 1982 the Gallup organization surveyed a random sample of 2,000 Canadians aged 18 and over with respect to their educational activities. On the basis of this information they were able to classify the respondents as non-learners or learners, the learners being those who had taken a course full-time, part-time or occasionally at any time since the initial interruption in their schooling. According to this definition, the survey found that 66% of Canadian adults are non-learners and 34% are learners. By region, "learners" are more likely to be found in the Prairies (32%), Quebec (37%) or Ontario (38%) than they are in Atlantic Canada (25%) and British Columbia (27%). The results also demonstrate that the learners were more likely to come from a previously high level of educational attainment. While 59% of the learners reported their last level of schooling as being community college training, only 11% reported "Public school or less" as being their last level attended. With respect to income, the proportion of learners increases in direct proportion to family income. Fully 48% of the surveyed "learners reported a family income of $30,000 and up" while only 17% of the respondents reported an income of less than $10,000. With respect to mother tongue, French-speaking respondents were slightly more likely to be learners than English-speaking respondents, and other mother tongue groups reported significantly lower levels of participation. Respondents from large urban centres were more likely to participate than their counterparts from smaller centres.

Using a smaller sample of "active" learners (those who had participated in studies in the last year), the survey drew some conclusions with respect to participation by age, sex and family income.

By age group, the survey indicated that learners are concentrated in the 18-21 age group (30%), with 23% of the group in the 25-44 age group; 10% in between the ages of 45-64 and 3% in the 65+ group.

As expected, the rate of participation increases in proportion to family income. There were no definitive conclusions with respect to gender differences among "active" learners, although the results indicate that males may participate at a higher rate than females.

The report suggests that socioeconomic mix, the male/female difference and the age group concentration are all more balanced among part-time learners, based on their information from Statistics Canada. That is, part-time adult learners are more likely to be female, from a lower income background and between the ages of 25-44; this constitutes a reversal of the trends found in full-time adult learning. Overall, Statistics Canada reports a 61% rate of growth in the number of part-time university undergraduate students in Canada between 1972 and 1981. With respect to part-time studies, the report states that "part-time learning is a promising development toward equity and an emerging 'second chance' phenomenon in Canadian adult education". (CAAE-ICEA, 1982, p.10).

The CAAE-ICEA report draws the following conclusions about adult learning.

> The data suggest that the provision of adult education in Canada is focussed upon social groups who already enjoy better than average access to the goods and services generated by Canadian society. The current offerings of adult education in Canada are working to increase rather than decrease gaps in Canadian society. Those in whom society has invested the largest educational investment during their youth are reaping the largest benefit from the current provision of adult education. (CAAE-ICEA, 1982, p.9).

2. The Report of the Task Force on Mature Students (1983) presents the results of a year long study initiated at The University of Alberta in response to a significantly increased participation by this group in recent years. The mandate of the study was to "identify concerns and problems, point to solutions and to sensitize all concerned to the needs of mature students". (University of Alberta Senate, 1983, p.iii). The report addresses institutional, situational, attitudinal and academic concerns and makes seventeen recommendations with respect to these areas.

The task force gathered its data from a number of informal interview situations and two questionnaires, from which they obtained a sample of 531 mature students. On the basis of this information the task force was able to obtain information about the characteristics of mature students as well as information about their special attitudes and problems.

The task force defined mature students as "all students aged 25 years or over and all non-matriculated adult students who are enrolled in a credit course or program at The University of Alberta." (1983, p.2).

In the 1983 winter session of The University of Alberta, mature students constituted more than one quarter of the total full-time enrolments and over three quarters of the total part-time enrolments. With respect to sex, women constituted the majority of undergraduate mature students while men constituted the majority of the graduate enrolments. All of the surveyed students reported relatively high family incomes - over 50% reported a current level of family income above $25,000.

Institutional concerns of mature students are related to: pre-admission procedures, availability of information, support services, course scheduling and choice, residency requirements, registration, accreditation, study space and parking.

Situational concerns include: time and responsibility pressures, financial pressures and family concerns (child care, disruptions in family life, etc.). By identifying these factors and those described as attitudinal concerns (lack of confidence, attitudes toward mature students) the report recognizes some of the more subtle influences felt by mature students. Somewhat more tangible is the cause and effect of financial pressure. Of particular concern is the assertion that "loans, scholarships, bursuries and awards for mature students and especially the part-time mature student appear to be in very short supply". (1983, p.25).

The academic concerns of mature students include: examinations, essay writing, study habits, skill improvement and upgrading and remediation. Upgrading, remediation and the connected issues of admission standards and requirements provide a focus for the report's additional recommendations as well. Although the task force appears willing to accomodate mature students in every other respect; (they developed a detailed proposal for "non-program", admission procedures) they firmly recommended that "courses required for matriculation standing should be completed outside the university prior to admission to a faculty". (1983, p.38). While the report points out that a relatively small proportion of mature students seek admission as non-matriculated adults, this restriction may, in time, have implications for accessibility.

4.7 **Concluding Remarks.** This review of contemporary participation and accessibility studies reveals a common concern with the composition of the post-secondary student population. No longer viewed in terms of sheer numbers, participation in post-secondary education is examined in terms of representative proportions of the eligible population. In assessing the success of various disadvantaged groups in accessing post-secondary education, the surveyed studies reach both optimistic and disheartening conclusions. The failure of students from lower socioeconomic status backgrounds to access post-secondary opportunity at the same rate as their more advantaged peers continues to confound educators and sociologists alike. Women, on the other hand, have been particularly successful in increasing their participation at the post-secondary level. Students from rural or small town backgrounds are apparently less interested or less qualified to pursue post-secondary education than their urban counterparts, although this barrier is steadily decreasing. While most ethnic groups in Canada are working to achieve equity at the post-secondary level, the Native persons struggle to improve their position at the secondary level. Generally speaking, optimism regarding equal participation is unevenly distributed across the spectrum of disadvantaged groups. Some studies suggest that there may be cause for a similar type of concern regarding mature students. The combined results of the studies surveyed suggest that sociologists, educators and other concerned authorities must measure the degree of their success thus far and look deeper into the acknowledged problem areas.

IV. METHODOLOGY

IV. METHODOLOGY

1. Introduction

This participation study examines patterns and trends in post-secondary enrolment in Alberta for the years 1971, 1976 and 1981 using special tabulations provided by Statistics Canada from census data. This section of the report provides an overview of the methodology used, notes some of the limitations in the methodology and defines the data employed in the study.

2. Methodology

2.1 Level of Analysis

The study examines the rate of participation by persons aged 18-24 in post-secondary education (P.S.E.) according to the characteristics of the individual student or non-student and his or her family background.

A necessary first step, therefore, is to examine the variables and use of the concept of a "participation rate" (P.R.).

Table 1 outlines the variables used in the study. Census data are available on the family and individual characteristics shown in the left hand column. Data are available on the age and sex distribution for both students and non-students.

In the right hand column of Table 1 the main participation variables are given. The study examines participation patterns by classifying the data into such categories as attending/not attending P.S.E. institutions and then examining the type of participation with respect to full-time or part-time studies and university or non-university attendance. To further aid in the analysis of participation patterns, the three age groups of 18-21, 22-24 and a total 18-24 group have been employed.

All of the data and tables are for persons in the 18-24 age range. Some of the implications of utilizing this age cohort will be discussed later.

TABLE 1 CHARACTERISTICS OF CENSUS DATA

INDIVIDUAL & FAMILY CHARACTERISTICS VARIABLES	PARTICIPATION VARIABLES
Individual: ° age (18-24) ° sex ° urban - rural Family: ° family income ° mother's education level ° father's education level ° highest level parental educa. ° ethnic background ° socio-economic levels (Blishen Scale)*	Not Attending P.S.E. or Attending P.S.E. Attending P.S.E.: ° university ° non-university Attending P.S.E. ° full-time study ° part-time study

* for 1971 and 1981 only.

2.2 The Participation Rate

Participation patterns and trends in P.S.E. are determined by calculating a P.R. for different social groups and comparing them. The P.R., as defined in this study, is the number of students at P.S.E. institutions in a specified age group (18-21, 22-24, or 18-24) divided by the number of persons in that age group in the province. For example, if there are 100 persons attending a P.S.E. institution in the age range 18-24 and there are 1,000 persons between 18-24 in the population then the P.R. is 100/1,000 or 10.0%.

A number of different P.R.'s are calculated in the study. The P.R.'s given normally vary by: the age group used (18-21, 22-24, 18-24), the type of enrolment (full-time, part-time or total of full and part-time) and the type of P.S.E. institution attended (university, non-university or total P.S.E.).

Caution is required in drawing conclusions from P.R. data. Many published P.R.'s use a different definition than the one used in this study. Typically the P.R. is calculated by dividing the total number of students, irrespective of their age, by the total number of persons in the 18-24 age group. In this study the P.R. is calculated using the specific age cohort. Some P.R.s in other reports are based on full-time enrolments only. Other P.R.s sometimes incorporate part-time students by converting them to "full-time equivalents". In this study separate P.R.'s are derived for full-time, part-time and a total enrolment, which is the sum of full and part-time with no conversion. The P.R.s of this study will also differ from other published P.R.s as census data, not institutional enrolment data are used.

The P.R.s shown will understate the P.R. compared with some others because students 25 years and older are excluded. Other P.R. data overstates the P.R. as all students are included but only the 18-24 age group is used as the denominator.

It must also be remembered that changes in P.R.s can be influenced as much by changes in the size of the 18-24 age group as by changes in enrolment levels. Demographic changes, such as sustained migration, can result in falling P.R.s despite increasing enrolments if the rate of growth in the age group outpaces the rate of growth in enrolments. The impact of migration into Alberta of 18-24 year olds during the period 1971 to 1981 on the P.R.s shown is significant and is discussed in the results section.

The data provides information to calculate trends in participation rates over a ten year period between 1971 and 1981. An analysis of these trends should be approached in the context of possible parallel changes in the social groupings which form the basis of the analysis. For example, if participation appears to be influenced by the level of parental education or family income it is important to examine any changes in the distribution of parental education and family income in the population surveyed.

2.3 Use of Census Data

Many participation studies are based on a single sample survey. Such surveys have the advantage of allowing the researcher to develop a set of specific, tailor-made questions to meet the research design. A major drawback, however, is that trends over time cannot be isolated and examined.

Both cross-sectional and longitudinal methods for studying participation rates have significant drawbacks. The use of results drawn from sample surveys done at different times to study trends is fraught with methodological difficulties, such as differences in question wording and sampling. Longitudinal studies permit sophisticated analysis but they are costly and time consuming.

Statistics Canada collects data on variables which have been identified in prior research as being relevant for studying post-secondary participation. The key advantage is that comparisons can be made for the beginning, mid-point and end of a decade and thus trends may be identified. Furthermore, the sample size is large as it includes a major segment of the 18-24 age group in the province. With the information provided by the census data it is possible to study changes in the characteristics of the 18-24 age group and their families over the years in question. For example, during the period 1971-1981 there were changes in the rural/urban distribution of population in Alberta and differences in the "educational stock" of the population. These changes have to be considered as one backdrop against which changes in participation in P.S.E. took place.

2.4 Analysis of the Rural Population

This study attempts to explore differences in access to P.S.E. by young people from urban and rural areas. Because of the reporting by some students coming from rural areas that they were "not living at home" the rural-urban categories must be treated with care. That is, a young person from a rural area who becomes a student in an urban area and who is not classified as living at home will become a "not living at home" urban student. Virtually all P.S.E. institutions are in urban areas, as defined in the study, and most students live as close as possible to their institutions. In other studies such a student who grew up in a rural area and attended high school in a rural area would probably be counted as "rural". In this study he would normally be classified as "urban". The interpretation of any differences in participation between urban and rural areas must bear this in mind.

The definition of urban and rural in the data refers to the address of the respondent to the census rather than to where the person grew up. For 18-24 year olds who are of an age when there is high mobility, especially for those becoming students from rural areas, this tends to distort the data when used to analyse the impact of rural residence and upbringing on P.S.E. participation.

It should also be noted that the census definition of urban used in the study states that an urban area has a population of 1,000 or more and a population density of 400 or more per square kilometre (1981).

The division between urban and rural in this study makes no statement about any cultural or psychological factors which may sometimes be associated with differences in urban and rural "ways of life" or sociological differences along an urban-rural division.

2.5 School Attendance

The enrolment levels which are reported will not be comparable to enrolment figures published in studies which use institutional, rather than census data. There are differences in timing and definition which affect the totals reported. The census relies on self reporting by the individual.

After a review of the matter for his study in Ontario using data from the 1971 and 1976 censuses Anisef concluded:

> The statistics on post-secondary participation rates among different subgroups presented ... are based on self-reports of school attendance during the year prior to the census. How do census-based statistics on participation rates differ from other commonly used sources, specifically, institutional statistics? Taking into account the varying definitions of and strategies for arriving at a participation rate, the evidence indicates that employing census statistics yields systematically lower rates of post-secondary school attendance, but since this is consistent over time, time series or trend patterns are accurately reflected (Anisef, 1982, p.84).

It is probable, therefore, that the data on enrolments in Alberta may also understate participation but be consistent over time so that trend analysis can be conducted.

3. LIMITATIONS OF DATA

There are four limitations to the data which have to be recognized in reviewing the results. The four limitations are:

(a) that some information is not available,

(b) that there are restrictions on the type of analysis which can be conducted, and

(c) that some data are only available for sub-groups of the 18-24 age population,

(d) the timeliness of the data.

3.1 Information Which is Not Available

1. The census does not provide information on the measured level of educational ability or attainment of students, (school tests, IQ tests, etc.). Therefore, information is not available which would permit the examination of how many potentially qualified students failed to proceed to P.S.E. or why they did not do so. Nor is it possible to compare, for example, the rates of participation for highly qualified and talented students while controlling for factors such as family income.

2. Information is not available on the cultural or psychological attitudes of the individual and his family to P.S.E. Such attitudinal factors may influence decisions regarding participation.

3. The census does not provide information on the financial resources available to a potential student or to a qualified person who failed to attend P.S.E. The only general guide is family income.

Differences in rates of participation, and differences in such rates over time, can be demonstrated. Explanations can be suggested for some of the differences, but these explanations cannot be taken directly from the data provided.

3.2 Restrictions on The Type of Analysis

The study reviews participation rates for different types of social groups. To the extent possible, the study attempts to demonstrate which of the variables appear to be most critical in influencing P.S.E. attendance. For example, one can attempt to determine whether the level of mother's education is an important factor in influencing decisions irrespective of ethnic background.

However, an important limitation must be recognized. The data from the special runs from Statistics Canada for the study are in aggregate form. They show the frequency distribution by category. Individual files are not available. Therefore, it is extremely difficult to conduct regression analysis in an attempt to pinpoint more accurately the relative importance of a variable in influencing participation to the exclusion of other variables.

Also, it is not possible to clearly demonstrate, in detail, the significance of the different variables and to show the causal links which may exist between them and P.S.E. attendance. It is only possible to demonstrate broad relationships between the variables and the P.R.

3.3 Population Coverage: Living Arrangements and Age of Students

One of the most critical features of the data is that information on the family variables (see Table I) is only available for those students who were reported as "living at home" at their parents address by the censuses.

A critical problem facing the census is the definition of membership in a household or family unit. Some students, especially if they are older, live apart from their parents and maintain their own permanent address. Other students live away from their "home address", their parental home, for a portion of the year while attending university or college. They may, however, continue to regard their parental home as their permanent address. In the 1981 census, the instructions asked respondents to include in their household students who were temporarily away from home.

The central issue is the extent to which the students who are reported as living at home (and for whom the family variable data are available) are representative of all students, irrespective of how their living arrangements were defined in the censuses.

It must be remembered that tables which depict family variables such as parental education or ethnic background are based on a sub-group of the total number of students. The extent to which the living at home group is representative of all students is given in summary form, in Table 2 below:

TABLE 2

STUDENTS REPORTED LIVING AT HOME AS A PERCENTAGE OF ALL STUDENTS

1981

CATEGORY	%
All Post-Secondary, Full- and Part-Time	
18-24	49.9
18-21	65.1
22-24	24.8
Urban (18-24)	47.6
Rural (18-24)	67.1
Male (18-24)	51.2
Female (18-24)	48.1
All Post-Secondary, Full-Time	
18-21	69.9
18-24	58.8
University, Full-Time	
18-21	79.0
22-24	47.8
18-24	69.4
Non-University, Full-Time	
18-24	49.6
Part-Time Students (18-24)	
University	23.0
Non-University	29.0

It can be seen that there are marked differences in the representatives of the living at home group. There are differences according to the age of the student, the type of study and type of institution attended.

The living at home group constitutes a large percentage of the full-time, university student group, especially for the 18-21 age group. The living at home group is much less representative of older students, students studying part-time and of full-time students not attending university.

The living at home group constitutes 49.9% of all students aged 18-24 attending post-secondary education when all types of institution (university and non-university) and both types of enrolment (full-time and part-time) are considered.

A further aspect of the coverage of the study which should be noted is that the data are for students aged 18-24. An increasing number of students, perhaps 25-30% of full-time students, depending on the type of institution, are 25 years of age or over. The study limits itself to examining the participation of the 18-24 age group.

A more complete review of the question is given in Appendix I.

3.4 Timeliness of the Data

Another limitation of the data is that it only extends to 1981. While this fulfills the original mandate of the study, there have been significant changes in participation since 1981. The study's data demonstrate a gradual decrease in participation rates, particularly between 1976 and 1981. Unstable economic conditions and more limited labour force activity have an effect on post-secondary enrolments which have risen sharply between 1981 and 1983. In some respects then, the trends documented in this study have subsequently been reversed.

V. RESULTS

1. INTRODUCTION

During the last decade, a great deal of attention has been focussed on increasing access for various groups that are underrepresented at some or all levels of post-secondary education. As mentioned previously, there has also been considerable debate as to what is meant by access and what role the Provincial Government should play in ensuring access. It is the Government's policy to encourage the participation of every Albertan who has the potential to benefit from such participation, regardless of financial capacity. In this sense, access is ensured if the province maintains sufficient institutions of post-secondary education so that all those citizens capable and motivated to pursue higher education have a place to do so, and that individual citizens seek out and take advantage of these educational opportunities. This may be referred to as "Type I" accessibility.

On the other hand, access can be defined as the removal of financial, and socio-cultural barriers to either an individual's or a particular group's participation in higher education. Our measure of access would then be "having a proportional representation of students based on the measurement of certain relevant characteristics of our society."[2] In this sense, access is not ensured merely by the presence of institutions. Various methods, including financial aid and special programs are employed to overcome the barriers and encouraged increased participation of various groups that have not traditionally taken advantage of higher education. This constitutes "Type II" accessibility and represents the kind of analysis conducted in the second section of the results.

2. TYPE I ACCESSIBILITY

In this section, we see the results of Type I accessibility - the accommodation of increased numbers of students enrolled at post-secondary institutions. In this sense, access has met with great success in Alberta. There is a multitude of institutions offering a multitude of career options. The age range of people involved in post-secondary studies has broadened considerably, largely due to expansion in Further Education Councils throughout the province. Community Consortia deliver the benefits of post-secondary education to nearly every area of the province, to people otherwise unable to access courses. Enrolments in every facet of the post-secondary system have grown exponentially over the last decade.

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[2] Dr. Edward Harvey, "Dimensions of a Decade - Higher Education in the Seventies" in From Quantitative to Qualitative Change in Ontario Education, ed. Garnet MacDiarmid, (Toronto: Ontario Institute for Studies in Education, 1976) p.7.

The efforts of the provincial government in providing opportunities to Albertans has been very successful during the past decade. Alberta has enjoyed an extremely high level of post-secondary attendance, despite the number of desirable alternatives available in the labour force during the decade under consideration for this study.

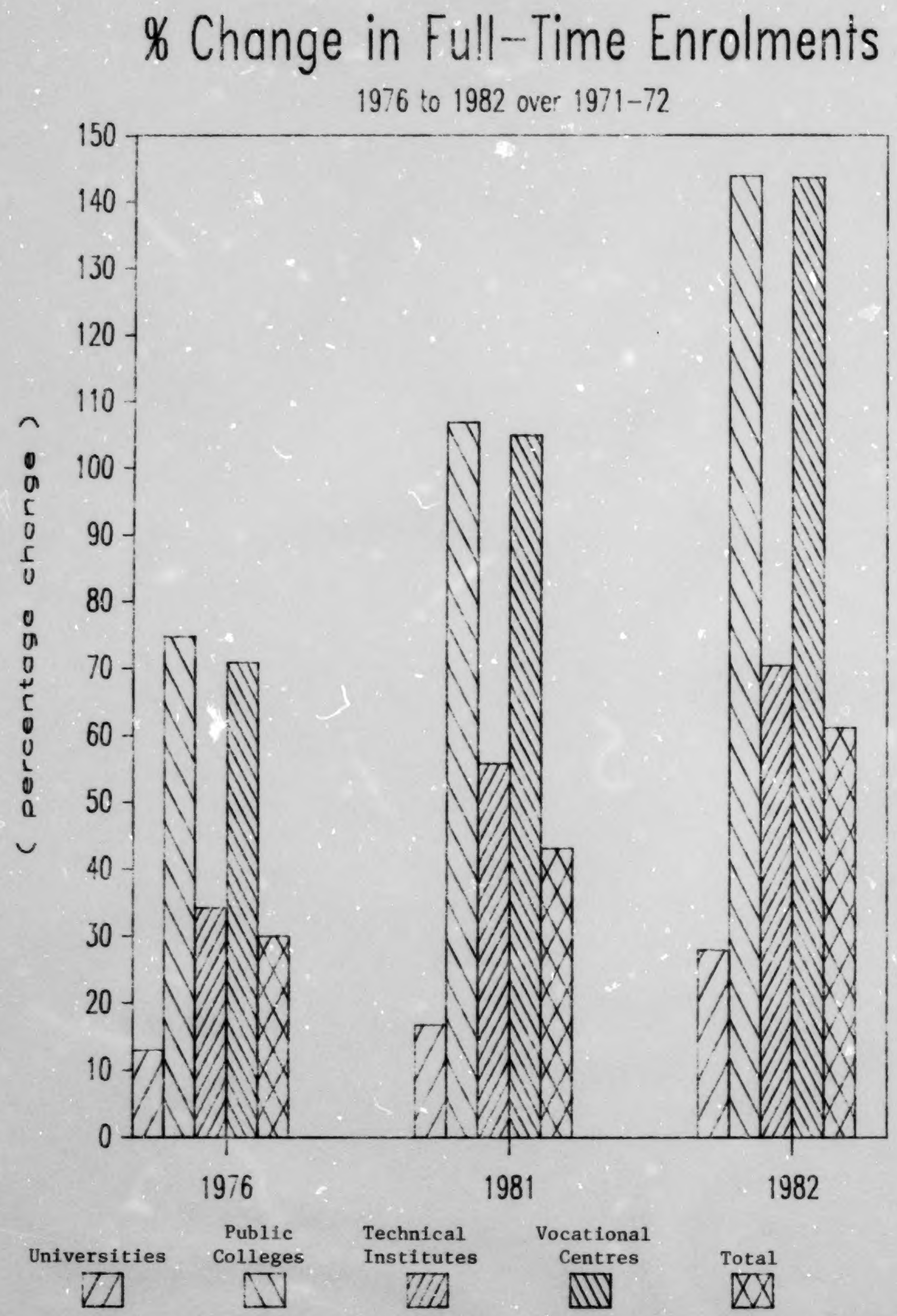
Although admittedly limited in addressing the issue of accessibility, enrolment trends are frequently utilized in preliminary measures of accessibility. Presented within a historical perspective, it does provide a picture of student choices and decisions within a particular context.

2.1 FULL-TIME ENROLMENTS

Between 1971-72 and 1982-83, full-time enrolment at Alberta's universities, public colleges, technical institutes and private colleges increased by 51%, from 41,058 to 61,022. The percentage increases were most dramatic for public colleges and vocational centres, with vocational centres increasing their registrations by 144 per cent from 5,456 to 13,297. Both colleges and vocational centres have attempted to provide an access to post-secondary education for students whose academic history would have limited such an opportunity in the past.

Enrolments in universities and technical institutes also increased significantly, by 8,045 and 4,679 respectively. Growth occured in every sector of the post-secondary system during the last decade, with the most dramatic increases evident in the non-university sector. Similarly, the relative proportions of the sectors has changed dramatically. Non-university

FIGURE 1



% Change in Full-Time Enrolments

1976 to 1982 over 1971-72

TABLE 3

ENROLMENT OF ALBERTA ADVANCED EDUCATION SYSTEM; 1971-72 to 1982-83

	Full-Time			
	1971-72	1976-77	1981-82	1982-83
Universities				
Alberta	18 243	20 019	19 571	21 045
Calgary	9 173	10 864	12 106	13 426
Lethbridge	1 218	1 483	1 771	2 208
Athabasca	...	...	...	...
Banff	...	...	...	...
TOTAL	28 634	32 366	33 448	36 679
Public Colleges				
Fairview	60	293	349	544
Grande Prairie	336	640	663	769
Grant MacEwan	410	1 729	1 784	1 993
Keyano	..	400	396	601
Lakeland	106	352	596	602
Lethbridge	955	1 213	1 443	1 425
Medicine Hat	442	419	763	1 065
Mount Royal	1 892	2 559	2808	3 237
Olds	313	426	670	845
Red Deer	779	1 223	1 483	1 831
TOTAL	5 293	9 254	10 955	12 912
Private Colleges				
Camrose	..	316	380	486
Canadian Union	..	39	128	140
Concordia	..	241	289	415
TOTAL	500*	596	799	1 041
Technical Institutes				
NAIT	3 661	4 497	4 921	5 381
SAIT	2 970	4 408	5 413	5 929
TOTAL	6 631	8 905	10 334	11 310
SUB TOTAL	41 058	51 121	55 536	61 942
Vocational Centres				
Calgary	1 345	2 320	2 349	3 602
Edmonton	2 311	1 992	4 926	5 872
Grouard	346	1 137	1 266	1 223
Lac La Biche	..	552	747	800*
CVC	531	937	1 415	1 529
APITC	923	2 390	484	271
TOTAL	5 456	9 328	11 187	13,297
GRAND TOTAL	46,514	60,449	66,723	75,239

* estimate; .. not available; ... not applicable

sector enrolments comprised 39% of total enrolments in 1971, compared to 52% of enrolments in 1982. These system-wide increases are particularly significant in the context of other post-secondary systems. For further information refer to Figure 1 and Table 3. The average annual increase for Canada, between 1971-72 and 1982-83, was 3.9%. In Alberta the average annual increase for the same period was 4.6%.

2.2 PART-TIME ENROLMENTS

Although data are not available for all institutions from 1971, one has only to examine the trend from 1975-76 to 1982-83 to note dramatic increases in part-time attendance. Part-time enrolments in university, public college, private college and technical institute sectors increased during this period by 62% from 46,396 to 75,258. The percentage increases were the most dramatic for the public colleges; between 1976-77 and 1982-83, this sector registered an increase of nearly 42%, from 12,215 to 21,191. Both the university and technical institute sectors reported significant growth during this period, with the latter reporting a 38% increase over a 6-year period while the universities experienced a 37% increase during the same time frame. In terms of raw numbers, the universities led the increase with 14,005 additional enrolments while the figures for the public colleges and technical institutes are 8,976 and 5,852 respectively. The increase at the private colleges has been less dramatic but nevertheless is significant. Much of the increase at the universities has occurred since 1980-81, while at the technical institutes the biggest increase occurred in 1980-81.

The growth of part-time enrolments is a contemporary participation trend which will, according to post-secondary forecasts, continue to gather strength into the future. The increases in this area may reflect a fast-emerging committment to life-long learning, as older students constitute the majority of part-time participants. For more information refer to Figure 2 and Table 4.

FIGURE 2

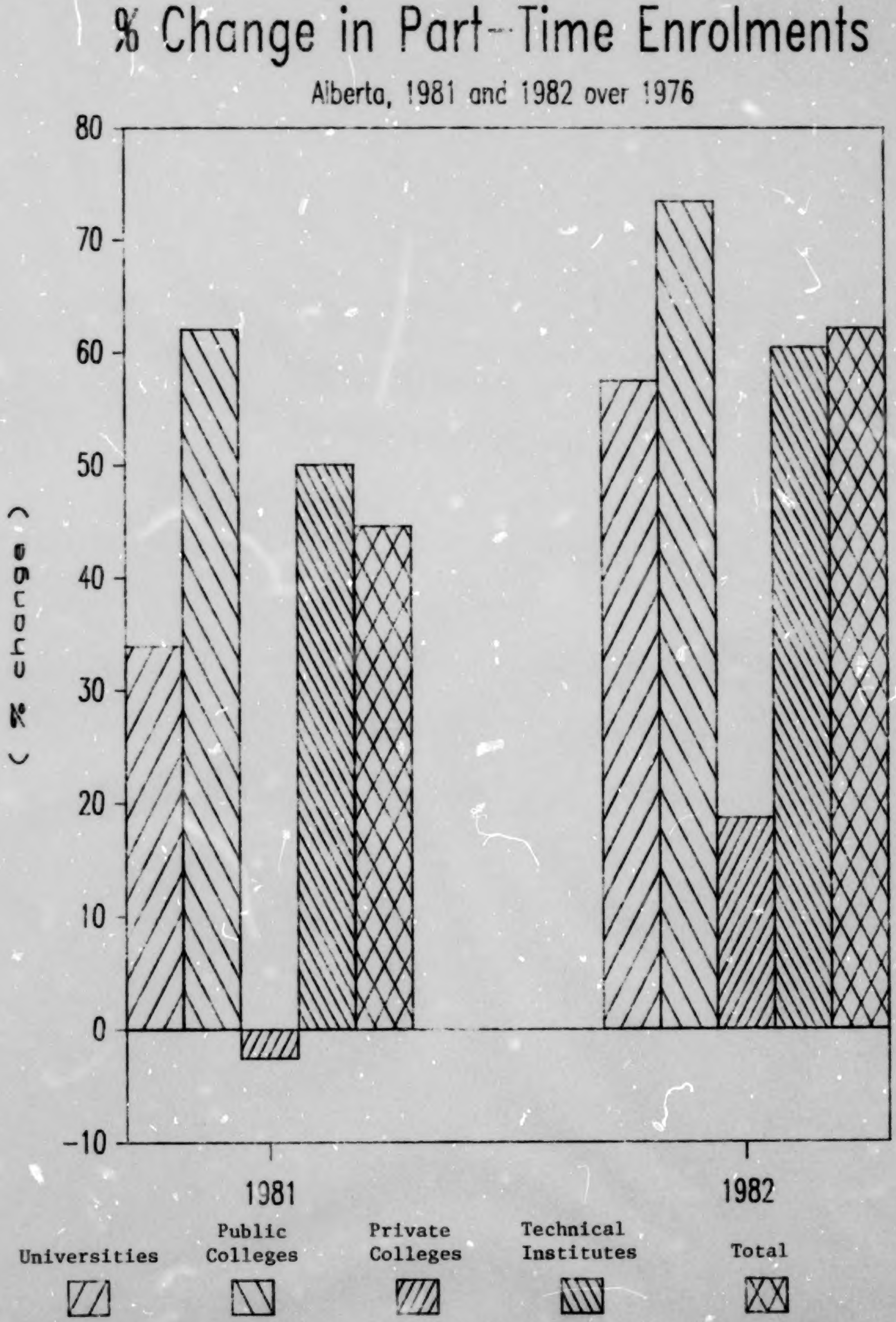

% Change in Part-Time Enrolments
Alberta, 1981 and 1982 over 1976
(% change)
80
70
60
50
40
30
20
10
0
-10
1981
1982
Universities
Public Colleges
Private Colleges
Technical Institutes
Total

TABLE 4

ENROLMENT OF ALBERTA ADVANCED EDUCATION SYSTEM; 1971-72 to 1982-83

	Part-Time			
	1971-72	1976-77	1981-82	1982-83
Universities				
Alberta	8 506	11 152	10 368	11 558
Calgary	6 285	7 699	10 976	12 889
Lethbridge	1 185	1 753	1 972	2 213
Athabasca	...	1 270	7 059	9 292
*Banff	...	2 477	2 251	2 403
TOTAL	15 976	24 350	32 626	[illegible] 355
Public Colleges				
Fairview	..	..	113	59
Grande Prairie	..	985	1 239	1 193
Grant MacEwan	..	4 647	5 003	5 498
Keyano	..	..	736	772
Lakeland	..	73	1 629	1 534
Lethbridge	..	1 057	1 981	2 259
Medicine Hat	..	907	1 653	1 929
Mount Royal	..	3 362	5 099	5 710
Olds	..	..	447	371
Red Deer	..	1 184	1 903	1 866
TOTAL	..	12 215	19 803	21 191
Private Colleges				
Camrose	..	122	119	147
Canadian Union	..	14	16	20
Concordia	..	19	16	17
TOTAL	..	155	151	184
Technical Institutes				
NAIT	..	5 146	9 073	10 695
SAIT	3 116	4 530	5 448	5 823
TOTAL		9 676	14 521	15 528
GRAND TOTAL	..	46,396	67,101	75,258

.. not available
... not applicable
* Formerly affiliated with the University of Calgary, Banff is now a centre for Continuing Education and professional fine arts training.

2.3 APPRENTICESHIP TRAINING IN ALBERTA

The growth in apprenticeship training is one of the great success stories of demand and growth in the post-secondary system. Intensified economic activity has provided a greatly increased demand for skilled tradesmen in the last decade. The post-secondary system's response has been overwhelming; in 1980 Alberta was training nearly one quarter of Canada's apprentices. Apprenticeship training also reflects the dual opportunity available to all Albertans in its unique function of training in conjunction with work. That is, Alberta supports a high level of labour force activity as well as a high level of post-secondary opportunity.

Apprenticeship programs are available through some public colleges and all technical institutes. Between 1975-76 and 1980-81 apprenticeship school attendance at public colleges increased by 173%, due mainly to the participation of six colleges in apprenticeship training in 1980-81, compared with four in 1975-76. The other venue of apprenticeship training, the technical institutes, witnessed a 53.4% increase in apprenticeship enrolments between 1975-76 and 1980-81.

Between 1971-72 and 1982-83 apprenticeship registrations increased from 8,599 to 21,647, or 152%. In 1971-72, the public colleges reported an apprenticeship enrolment of 160. By 1982-83 there were 3,332 apprenticship enrolments in the public colleges sector. Similarly, the technical institutes have registered a phenomenal growth in apprenticeship enrolments over the ten year period, more than doubling between 1971-72 and 1982-83. For further information, refer to Figure 3 and Table 5.

When examined by sex, apprenticeship enrolments demonstrate a high level of male participation. In 1983 and 1984 females constituted approximately 2% of total apprentices. It is significant, however, that female representation in apprenticeship training is increasing. When examined by age, the statistics on active apprentices indicate that 63% of the apprentices are in the 18-24 age group, with 35% in the 25-44 group. This may indicate that apprenticeship training constitutes a significant alternative to other forms of post-secondary training for youths in the age group under consideration for this study.

FIGURE 3

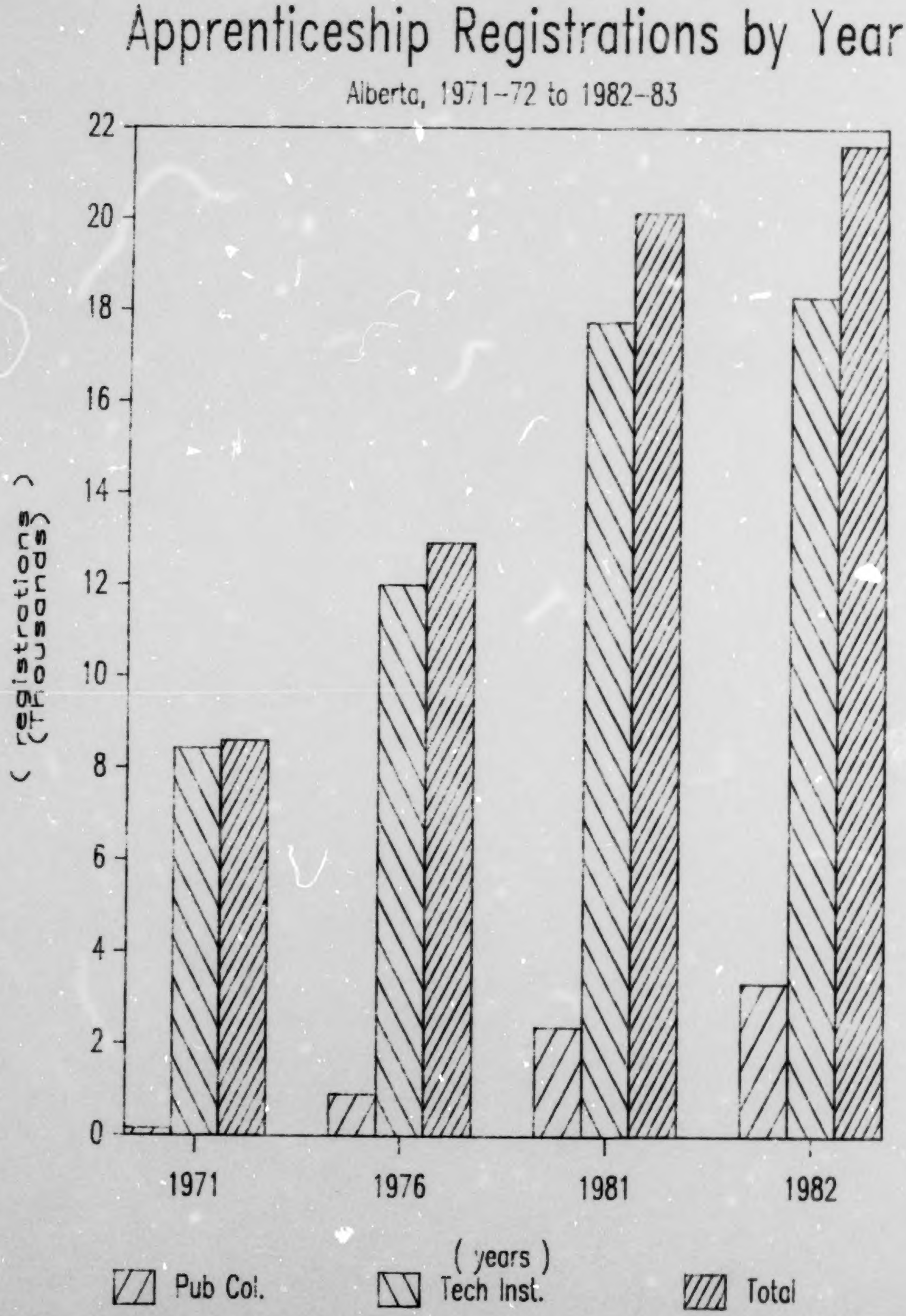

Apprenticeship Registrations by Year
Alberta, 1971-72 to 1982-83
22
20
18
16
14
12
10
8
6
4
2
0
(registrations)
(Thousands)
1971
1976
1981
1982
(years)
Pub Col.
Tech Inst.
Total

TABLE 5

ENROLMENT OF ALBERTA ADVANCED EDUCATION SYSTEM; 1971-72 to 1982-83

	Apprenticeship			
	1971-72	1976-77	1981-82	1982-83
Public Colleges				
Fairview	48	127	430	489
Grande Prairie	...	...	...	...
Grant MacEwan	...	...	...	...
Keyano	...	154	255	459
Lakeland	...	37	451	572
Lethbridge	112	500	577	666
Medicine Hat	...	...	136	340
Mount Royal	...	...	...	...
Olds	...	97	96	124
Red Deer	...	...	438	682
TOTAL	160	915	2 383	3 332
Technical Institutes				
NAIT	4 752	7 097	10 497	10 585
SAIT	3 687	4 920	7 260	7 730
TOTAL	8 439	12 017	17 757	18 315
GRAND TOTAL	8,599	12,932	20,140	21,647

... not applicable

2.4 NON-CREDIT ENROLMENTS

The growth of enrolments in non-credit courses may reflect the general trend toward life-long learning, and the increased participation of adults in post-secondary education. Other studies have revealed that as well as being readily accessed by older students, non-credit education is particularly attractive to people in rural areas. Thus, non-credit programming serves a dual purpose with respect to non-traditional students in terms of both age and distance. The Further Education Councils have gained a prominent position in this network over the last decade. Between 1971 and 1978 the number of Further Education Councils more than doubled and the number of participating adults increased by over five times. As of 1983, there were 93 Further Education Councils in operation throughout the province.

Between 1976-77 and 1981-82, non-credit registrations increased 78% from 107,571 to 191,089. The public colleges led the increase with 39,316 more registrations over the period. At the universities and the technical institutes registrations rose 26,799 and 4,103 respectively. The AVC's had an increase of 13,300 and along with the public colleges increased their participation in the non-credit area by a healthy margin. The figures for 1976-77 enrolment in Further Education Councils are not available but the 1981-82 total of 239,854 provides evidence of phenomenal growth in this sector. For further information, refer to Figure 4 and Table 6.

FIGURE 4

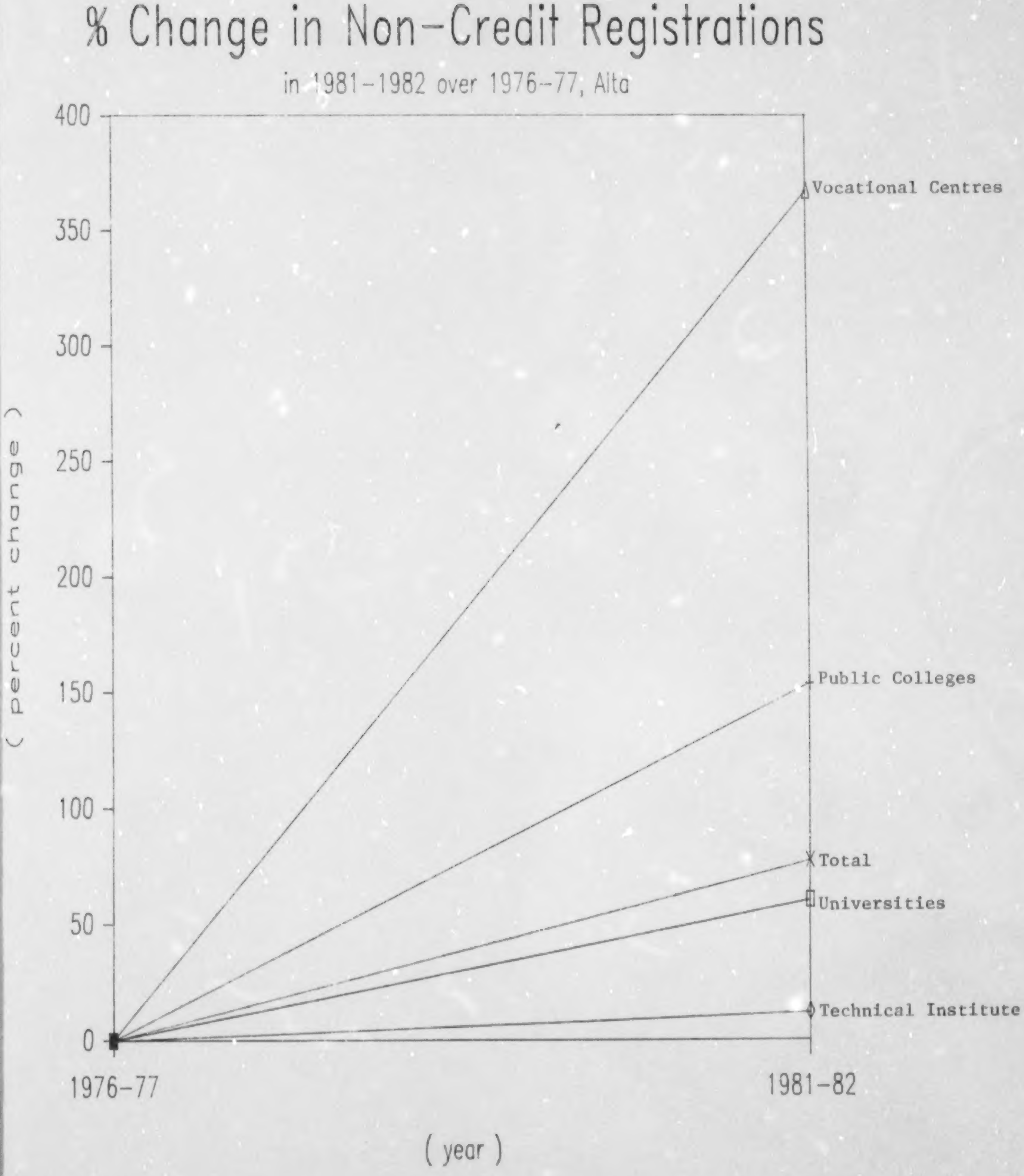

% Change in Non-Credit Registrations
in 1981-1982 over 1976-77, Alta
400
350
300
250
200
150
100
50
0
(percent change)
Vocational Centres
Public Colleges
Total
Universities
Technical Institute
1976-77
1981-82
(year)

TABLE 6

ENROLMENT OF ALBERTA ADVANCED EDUCATION SYSTEM: 1976-77 AND 1981-82

	Non-Credit	
	1976-77	1981-82
Universities		
Alberta	20 787	34 093
Calgary	22 013	26 385
Lethbridge	1 504	10 625
Athabasca	...	...
Banff	...	...
TOTAL	44 304	71 103
Public Colleges		
Fairview	186	1 850
Grande Prairie	..	2 705
Grant MacEwan	..	11 097
Keyano	1 111	2 477
Lakeland	3 892	4 758
Lethbridge	5 306	11 221
Medicine Hat	2 899	5 979
Mount Royal	6 323	14 263
Olds	2 596	1 708
Red Deer	3 225	8 796
TOTAL	25 538	64 854
Technical Institutes		
NAIT	16 443	14 013
SAIT	17 663	24 196
TOTAL	34 106	38 209
Vocational Centres		
Calgary	1 630	8 009
Edmonton	1 432	3 800
Grouard	33	4 063
Lac La Biche	528	1 220
TOTAL	3623	16 923
SUB TOTAL	107,571	191,089
Further Education Council	..	239,854

.. not available
... not applicable

2.5 TOTAL SYSTEM ENROLMENT GROWTH

As indicated in Figure 5, Alberta has experienced a decade of growth in the Alberta post-secondary system and the subsequent enrolment growth in the 18-24 age group. Demographic changes, such as the effect of the "baby boom" population, are also demonstrated in the graph. Between 1971 and 1980, full-time, 18-24 year old post-secondary enrolment increased from nearly 32,000 to more than 38,000, a 16% increase. The system reached a peak enrolment of approximately 39,000, in 1977.

System-wide growth over a ten-year period as well as the most recent increases in post-secondary enrolment are illustrated in Figure 6. Here again, we see evidence of the baby boom population, although its effect is more accentuated when considering the 18-24 age group. The graph also illustrates a phenomenon which has recently impacted on the post-secondary system: a direct relationship between economic downturn and enrolment growth. During uncertain economic times, (N.B. 1981-83) education participation becomes a viable alternative to labour force activity.

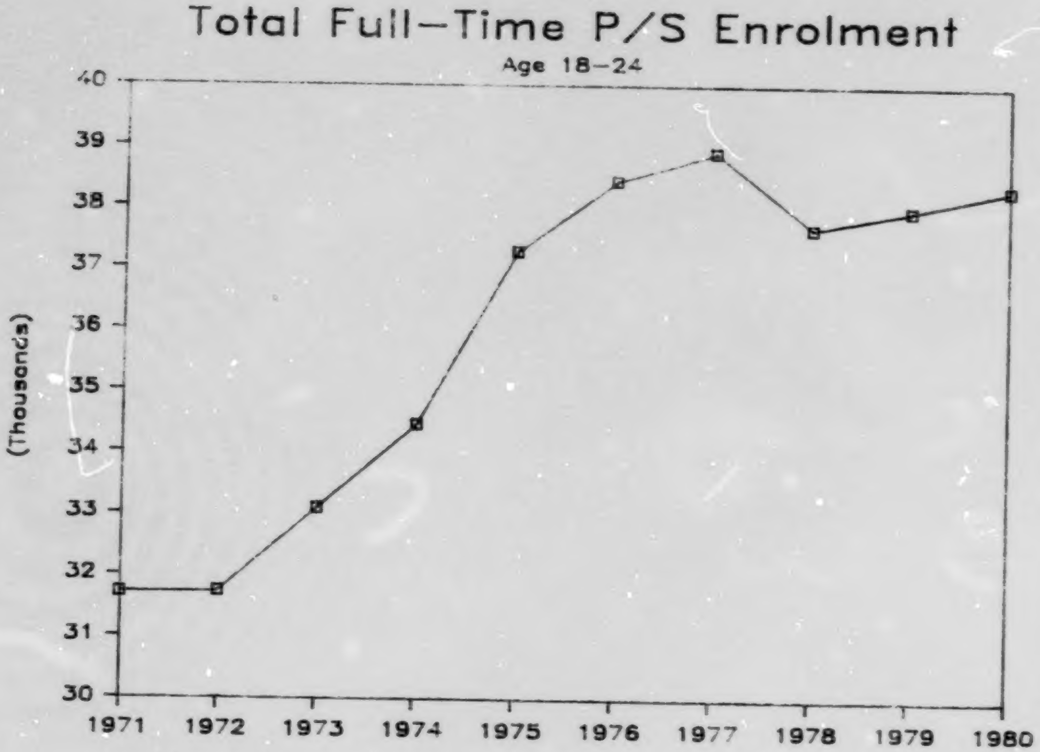


Figure 5

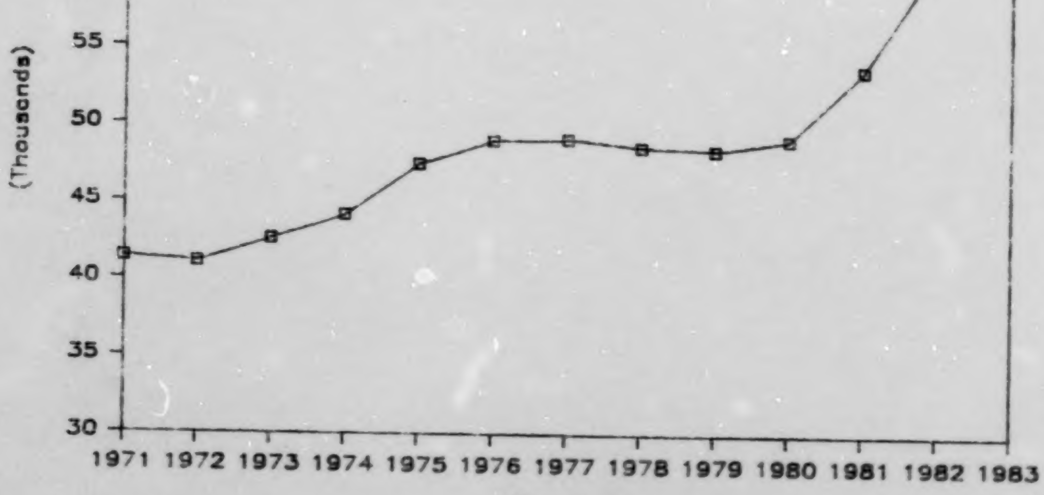
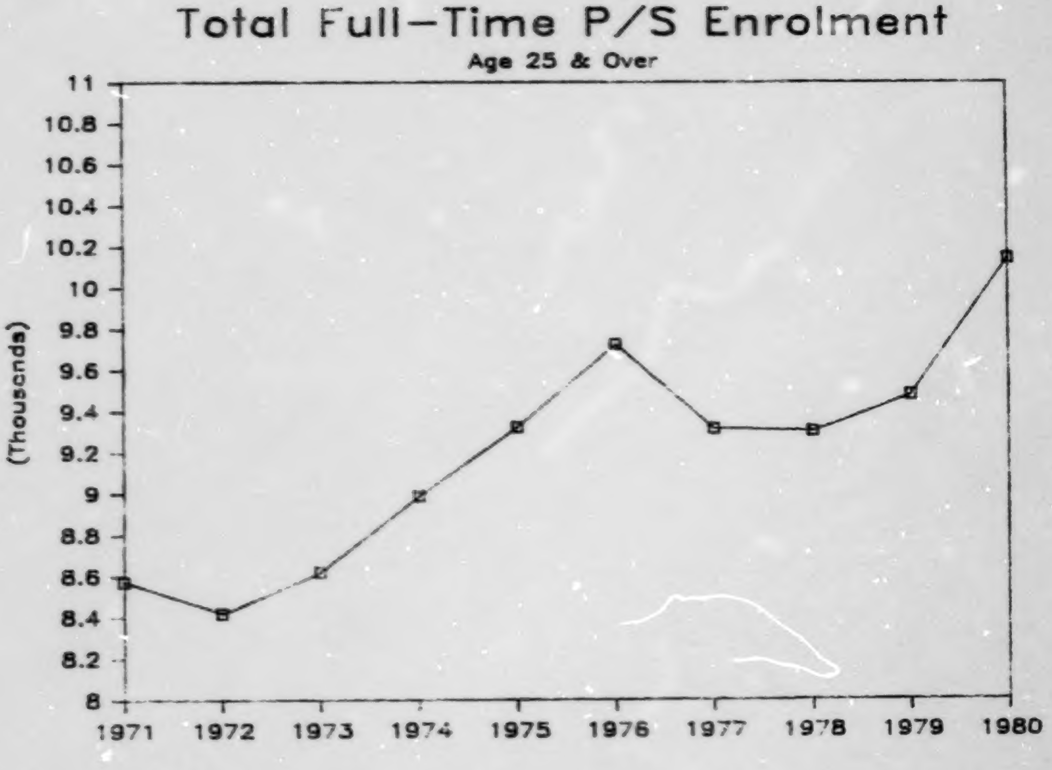


Figure 6

FIGURE 7



The trend toward increased participation of adults in post-secondary education is evident in Figure 7, which depicts enrolment increases for students 25 and over during a ten-year period. The participation by adults or "mature students" is expected to continue to increase, as suggested by the 1978-80 period on the graph. The increases are largely due to enrolments in the non-university sector of the system.

2.6 DEMOGRAPHIC CHANGES AFFECTING PARTICIPATION

Migration has had a unique and powerful influence on the demographic profile of the citizens in the province of Alberta. The Statistics Canada report On the Move: Results of a Special Survey on Migration (1983) states that "one out of five individuals in the working age population in Alberta was a migrant, compared to one out of 25 in Quebec." (1983, p.88) In Alberta, in 1982, migrants comprised 27.1% of the married population ages 25-44 years, and 34.3% of the single population age 20-24 years. The effect of migration resulted in increased proportional representation by the population in the age groups 20-24 and 25-44; and decreased proportional representation in the remaining age groups. The results of this population movement have particular significance for the participation study.

TABLE 7

FULL-TIME ENROLMENT INCREASES VS POPULATION INCREASES: 1971, 1976, 1981

	1971	1976	1981	% change 1971-1981
Total Full-Time Enrolments*	41,058	50,525	54,737	33.0
Alberta Population (18-24)	202,200	252,865	358,300	77.0

* Full-time enrolments in universities, public colleges, private colleges and technical institutes.

Since the participation rate is calculated by dividing enrollees by the 18-24 aged population, significant growth of the denominator of this equation has implications for the participation rate. It may, therefore, be useful to examine the characteristics of this sector of the Alberta population.

The survey conducted by Statistics Canada (1983) provided general information about the characteristics of in-migrants to Alberta. As already discussed, there is information about their age, relative to the rest of the Alberta population. We also know that migrants have achieved a higher degree of educational attainment than non-migrants. As a result of in-migration between 1976 and 1982, Alberta has experienced the greatest distributional change with respect to educational attainment of all the provinces. Excluding migrants, the working age population of Alberta in 1982 consisted of 15.0% of persons with 0 to 8 years of schooling, 56.3% with some secondary but no post-secondary education and 28.7% with at least some post-secondary education. The inflow of migrants changed this distribution to 13.2% of the working age population with 0 to 8 years of schooling, 54.8% with some secondary education, and 32.0% with some post-secondary education.

Based on this information we can make certain assumptions about migrant activity in the province of Alberta. Although the amount of inter-provincial transfer to Alberta's institutions has increased in recent years, migrants came to the province primarily for employment related reasons. In the "boom" years, which are also census years under study for their participation rates, a move to Alberta meant a greater probability of employment. There were more migrants employed after moving to Alberta than employed before their move. The employment level of in-migrants increased by 4.1% from 188,000 before migration to 195,000 after migration (Statistics Canada, 1983). The number of migrants in the labour force also increased by 8.9% from 226,000 before migration to 246,000 after migration.

Having ascertained this much about the labour force activities of migrants, we can also make certain assumptions about their post-secondary participation. Full-time participation rates of the recent migrants (migrants after June 1976) in post-secondary education, age 15 to 54, were below the rates of non-migrants by 35% for males and 13% for females. On the other hand, the participation rates of the migrants in part-time education were found to be higher than the non-migrants by over 200% for males and 50% for females. Similar differences were observed for persons age 17 to 24. Migrants are much more inclined than non-migrants to pursue skill-related post-secondary programs. The data also indicated that migrants preferred part-time or full-time college over university. The possible effect of migration on participation rates is highlighted below.

Participation Rate, 1976

$$\frac{50{,}525 \text{ (full-time post-secondary students)}}{252{,}865 \text{ (18-24 population)}} \qquad \text{Participation rate} = \underline{\underline{20.0\%}}$$

Between 1971-1976 the net migration of 18-24 year olds totalled approximately 30,165.

Participation Rate Excluding Migrants, 1976

$$\frac{50{,}525}{222{,}727} = \underline{\underline{22.7\%}}$$

Participation Rate, 1981

$$\frac{54{,}737 \text{ (full-time post-secondary students)}}{358{,}300 \text{ (18-24 population)}} \qquad \text{Participation rate} = \underline{\underline{15.7\%}}$$

The total net migration for 18-24 year olds between 1976-81 was approximately 84,005.

Participation Rate Excluding Migrants, 1981

$$\frac{54{,}737}{274{,}295} = 19.9\%$$

The inclusion of migrants in calculating full-time participation rates in post-secondary education is estimated to reduce the average rate without migration by about 13% for the 17-24 age group and 20% for the 15-54 age group. Although there are a good deal of inherent methodological difficulties when attempting to factor out migrants; it is a worthwhile exercise if only to examine the possible effects of an inflated population on the participation rates.

3. TYPE II ACCESSIBILITY

A participation rate is derived by dividing the number of enrolees in a particular age group by the total population in that age group. The preceding section deals with the first half of that equation in its description of enrolment growth over the last decade. The second section of the results deals with these enrolments in relation to the relevant population group. While enrolments have indeed risen over the ten year period under consideration for the study, participation rates have dropped. This reflects, among other things, a significant increase in the size of the 18-24 age group, which has increased at a rate of growth which has outstripped enrolment growth.

More specifically, participation rates give us information regarding Type II accessibility. While rising enrolments may indicate a positive trend, participation rates provide us with a means of measuring the progress of distinct social and economic groups. Thus, raw enrolment figures are only part of the picture. The participation rates of students according to gender, mother tongue, socioeconomic background and geographical location give a clearer indication of the degree of educational opportunity accessed in this province.

3.1 System-Wide Participation Rates. As shown in the following tables and figures, the system-wide participation rate has declined between 1971 and 1981, from 21.1% to 20.4%. The participation rate of the 18-21 year olds declined while the participation of the 22-24 year olds increased between 1971 and 1981. In the same period, participation in university education declined from 14.6% in 1971 to 11.0% in 1981, while participation in non-university post-secondary education increased from 6.5 to 9.5%.

TABLE 8

SYSTEM-WIDE PARTICIPATION

(18-24 - YEARS OLD)

	1971	1976	1981
Overall Participation Rate	21.1	23.1	20.4
Urban	22.4	24.9	21.5
Rural	15.8	15.1	14.6
18-21	24.5	25.1	22.0
22-24	16.6	20.4	18.5
Male	25.4	25.6	22.1
Female	16.8	20.6	18.7
Full-Time	16.9	17.5	14.8
Part-Time	4.1	5.6	5.7
University	14.6	12.6	11.0
Non-university	6.5	10.6	9.5

3.1 System-Wide Participation

System-wide participation has increased with respect to four variables over the ten year period: 22-24 year olds, females, part-time attendance, and non-university attendance.

The overall participation rate has declined between 1971 and 1981, from 21.1% to 20.4%. The participation rate of 18-21 year olds decreased during the same period, from 24.5% to 22.0%. Participation in university education declined from 14.6% in 1971 to 11.0% in 1981, while participation in non-university post-secondary education increased from 6.5% to 9.5%.

Between 1971 and 1976, a uniform increase was noted, with two exceptions: rural participation and university participation. The largest increases during this period were registered in the participation of 22-24 year olds, part-time students, female and non-university students.

FIGURE 8

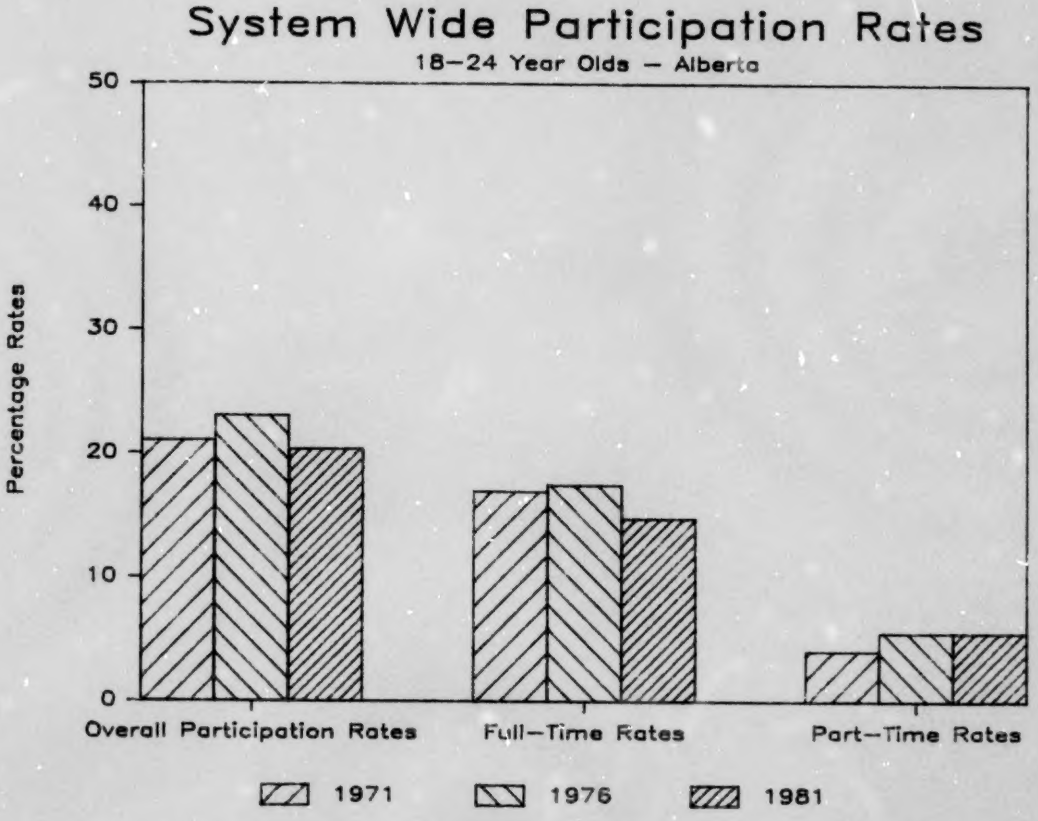

System Wide Participation Rates
18–24 Year Olds – Alberta
Percentage Rates
50
40
30
20
10
0
Overall Participation Rates
Full–Time Rates
Part–Time Rates
1971
1976
1981

TABLE 9

SYSTEM WIDE FULL-TIME PARTICIPATION

(18-24 - ALBERTA)

	1971	1976	1981
Urban	17.8	18.8	15.5
Rural	13.6	11.7	10.9
18-21	21.6	20.8	18.0
22-24	10.8	12.8	10.9
Male	19.9	19.1	15.7
Female	14.1	15.9	13.8
University	13.0	11.2	9.0
Non-university	4.0	6.3	5.8
Overall Full-time Rate	17.0	17.5	14.8

3.2 System-Wide Full-Time Participation

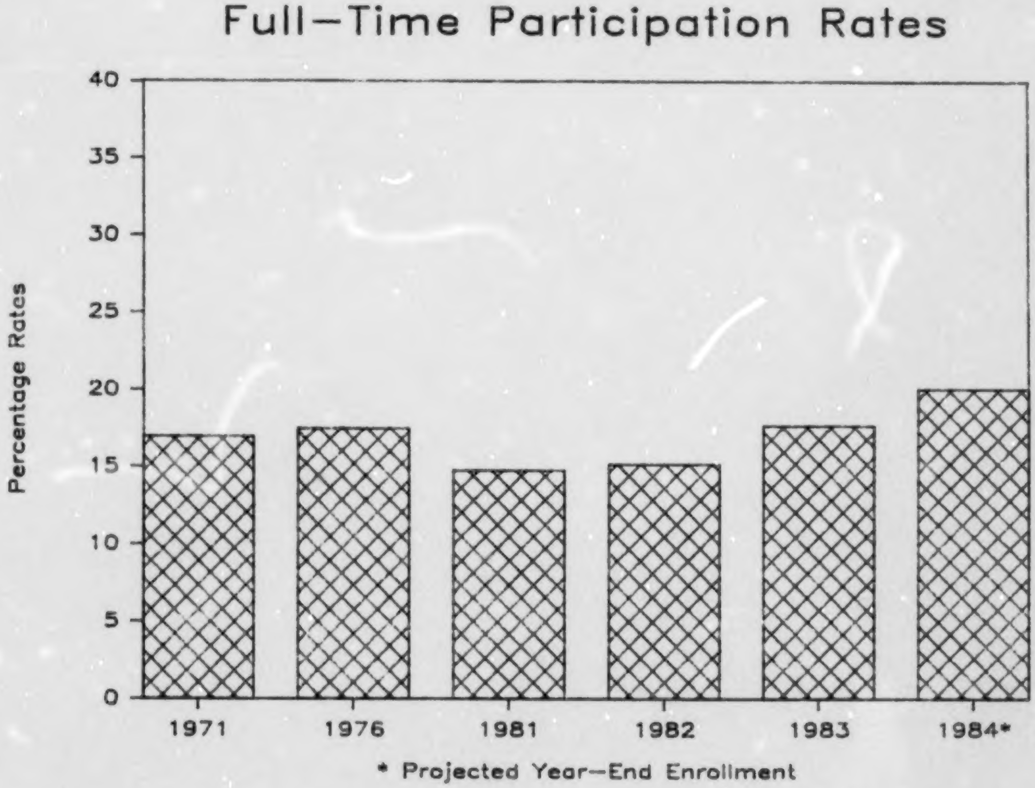
Full-time participation rates reflect the trends exhibited in overall participation rates.

Between 1971 and 1981, the full-time participation rates of 22-24 year olds increased from 10.8% to 10.9% and full-time participation in the non-university sector increased from 4.0% to 5.8%.

Between 1971 and 1976, there were increases in urban participation, and participation by 22-24 year olds, females and non-university students. During the same period there were decreases in rural participation and participation by 18-21 year olds, males and university participants.

Between 1981 and 1984, the full-time participation rate has increased steadily, rising to a rate well above the 1971 level.

FIGURE 9


Full-Time Participation Rates
Percentage Rates
40
35
30
25
20
15
10
5
0
1971
1976
1981
1982
1983
1984*
* Projected Year-End Enrollment

3.2 POST-SECONDARY ENROLMENT - INTERPROVINCIAL COMPARISON

While Alberta has to some extent been resistant to, or different from, national economic and demographic trends, it is interesting to view educational participation in a broader context as demonstrated in Table 10.

With respect to non-university education, and the participation of 18-21 year olds, the nation-wide trend over the ten year period has been for rates to increase. Alberta is consistent with this trend and the 1980-81 rate is second only to those of Quebec and Ontario.

Nation-wide participation in university has decreased over the ten year period in every province except Ontario. Alberta is consistent with the general trend here, with full-time university enrolment decreasing from 15.3% in 1971-72 to 10.1% in 1980-81.

Total post-secondary participation in university and non-university has decreased in every province except Quebec and Ontario.

TABLE 10
POST-SECONDARY FULL-TIME ENROLMENT RELATED TO RELEVANT AGE GROUP POPULATION
ALBERTA AND SELECTED PROVINCES
1971-72 - 1980-81

	1971/72	1976/77	1977/78	1978/79	1979/80	1980/81
Non-University						
Related to 18-21 age group population						
Alberta	8.9	10.7	10.8	10.7	10.5	10.2
British Columbia	4.7	9.2	9.3	9.2	8.7	8.9
Saskatchewan	3.8	3.3	3.2	3.2	3.2	3.2
Manitoba	5.6	4.4	4.0	3.9	3.8	4.3
Ontario	10.9	9.5	9.6	10.0	10.6	11.3
Quebec	8.2	23.6	25.8	26.3	25.6	26.1
Canada	8.2	12.5	13.2	13.4	13.3	13.6
University						
Related to 18-24 age group population						
Alberta	15.3	12.4	11.8	10.8	10.2	10.1
British Columbia	13.2	10.1	9.8	9.3	9.2	9.1
Saskatchewan	14.3	12.6	11.8	11.4	11.1	11.3
Manitoba	14.0	13.7	13.1	12.4	11.9	12.1
Ontario	13.4	15.5	14.6	13.9	13.6	13.9
Quebec	13.9	9.0	9.3	9.4	9.8	10.2
Canada	13.7	12.4	12.0	11.5	11.4	11.6
Total Post-Secondary						
Related to 18-21 age group population						
Alberta	20.5	18.7	18.0	16.9	16.2	15.9
British Columbia	15.9	15.5	15.2	14.6	14.3	14.2
Saskatchewan	16.6	14.7	13.7	13.3	13.0	13.2
Manitoba	17.3	16.3	15.5	14.7	14.1	14.6
Ontario	19.5	21.1	20.2	19.7	19.8	20.5
Quebec	18.7	23.1	24.5	25.0	24.8	25.3
Canada	18.5	19.8	19.7	19.3	19.1	19.5

NOTE: Interprovincial comparisons are not valid because of differences in education systems.

SOURCE: Statistics Canada, Catalogue No. 81-229.

TABLE 11

SYSTEM-WIDE PART-TIME PARTICIPATION

(18-24 - ALBERTA)

	1971	1976	1981
Urban	4.6	6.1	6.0
Rural	2.1	3.4	3.7
18-21	2.8	4.3	4.0
22-24	5.8	7.5	7.7
Male	5.5	6.6	6.4
Female	2.7	4.6	4.9
University	1.6	1.4	1.9
Non-university	2.5	4.2	3.7
Overall Part-time Rate	4.1	5.6	5.6

3.3 System-Wide Part-Time Participation

An examination of part-time participation demonstrates, in some cases, a reversal of some of the trends established in overall and full-time participation.

Between 1971 and 1981, rural part-time participation has increased as well as participation by 22-24 year olds, females and university students. The overall part-time participation rate has also increased during this period.

Between 1976 and 1981, the gap between rural and urban participation decreased, as well as the gap between males and females and university and non-university students.

3.3 POST-SECONDARY PARTICIPATION BY LIVING ARRANGEMENT

The relative proportions of these two groups (living with parents and not living with parents) in the 18-24 population and in the student population have already been discussed in the methodology section of this report. An analysis of their participation rates lends a different perspective to the behavior of these two groups. Since our information on family variables deals only with those students "living with parents", it is important that we determine the degree of similarity between these students and their counterparts "not living with parents".

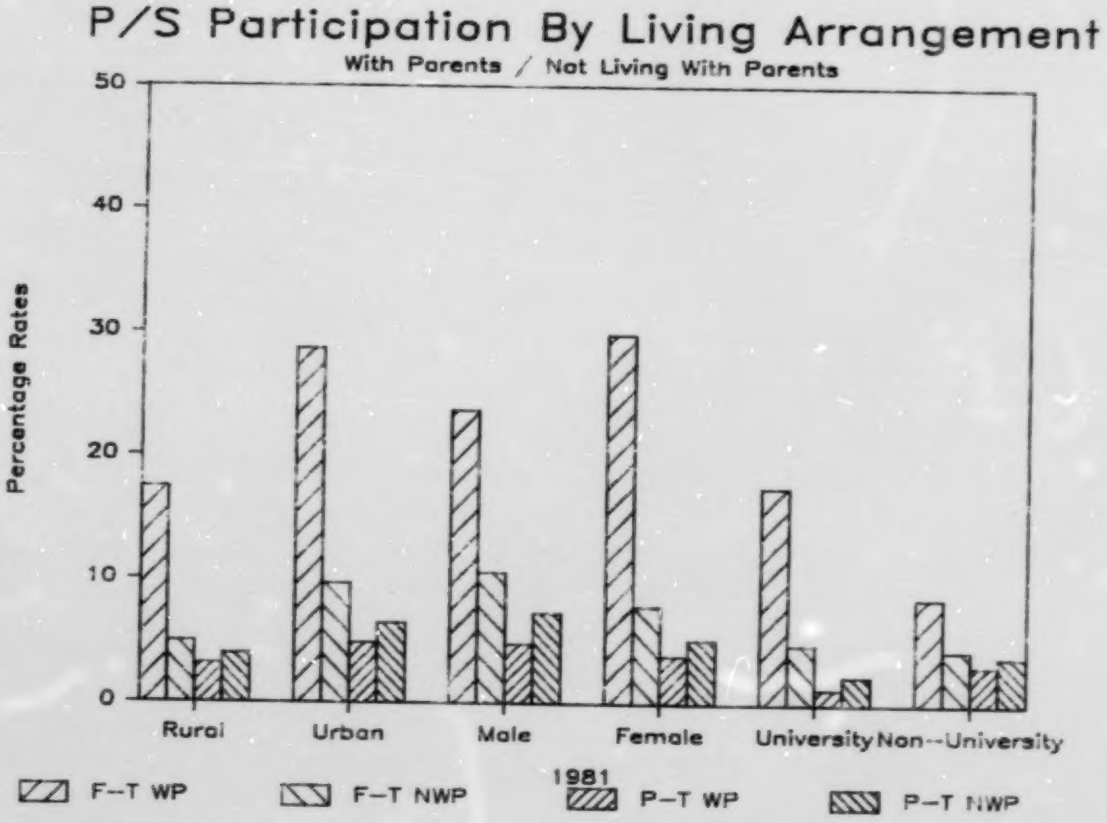
Perhaps the most interesting difference between these two groups is with respect to their full-time and part-time attendance. Those students living at home have an overall participation rate which far exceeds that of those students not living at home. The part-time participation rate for students not living with parents is, however, consistently higher in every single case across the three years. We can make certain conjectures on the basis of this information. These students may be employed full-time and thus choose to pursue their studies on a part-time basis. In other words, they may have neither the means nor the desire to attend school full-time. They are presumably more independent from their parents. Perhaps, then, they are also less subject to the influence of the family variables. Although we cannot verify this sort of conjecture, we are able to examine other facets of their post-secondary participation. Ideally, some of these observations may be applied to the family variables.

Observations (Figure 10 and Table 12):

- When considered by age, the participation patterns of these two groups are very similar. The 18-21 year olds participate in full-time studies at a higher rate than 22-24 year olds. The reverse is true for part-time studies. There is, however, a considerable increase over the ten years in the participation of 22-24 year olds not living with parents.

- Urban full-time participation has decreased slightly over the ten year period, for both groups. Rural full-time participation has decreased

FIGURE 10


P/S Participation By Living Arrangement
With Parents / Not Living With Parents
Percentage Rates
0
10
20
30
40
50
Rural
Urban
Male
Female
University
Non--University
1981
F--T WP
F--T NWP
P--T WP
P--T NWP

slightly for students living with parents, but has increased slightly for those students not living with parents.

- Male full-time participation has decreased slightly over the ten year period, with the exception of a 1971-76 increase for males not living with parents. While females living with parents register a slight decrease as well, their counterparts not living with parents show an increase in participation.

- By sector, the behavior of the two groups is consistent with the general trend. University participation has decreased over the ten year period while non-university participation has increased.

For more information, refer to Figure 10 and Table 12.

TABLE 12
POST-SECONDARY PARTICIPATION BY LIVING ARRANGEMENT, LIVING WITH PARENTS VS. NOT LIVING WITH PARENTS

	1971				1976				1981			
	LIVING WITH PARENTS		NOT LIVING WITH PARENTS		LIVING WITH PARENTS		NOT LIVING WITH PARENTS		LIVING WITH PARENTS		NOT LIVING WITH PARENTS	
	F-T	P-T	F-T	P-T	F-T	P-T	F-T	P-T	F-T	P-T	F-T	P-T
AGE												
18-21	28.5	2.5	12.2	3.3	27.8	3.8	13.6	4.8	26.4	3.6	10.4	4.3
22-24	26.6	4.8	7.7	6.0	27.3	6.8	10.1	7.7	25.2	7.7	8.2	7.7
18-24	28.2	2.9	9.5	5.0	27.7	4.6	11.7	6.4	26.1	4.5	9.2	6.2
LOCATION												
Rural	21.3	2.1	4.0	2.2	18.6	3.0	5.6	3.8	17.5	3.2	5.0	4.0
Urban	30.8	3.2	10.5	5.3	30.6	4.7	12.8	6.9	28.7	4.9	9.7	6.5
SEX												
Male	26.3	3.3	13.4	7.8	25.0	4.4	14.3	8.3	23.7	4.8	10.6	7.3
Female	31.2	2.3	6.9	2.9	32.1	4.0	9.6	4.9	29.9	3.9	7.9	5.2
SECTOR												
University	22.3	1.1	6.8	2.0	19.1	1.3	6.6	1.6	17.5	1.3	4.8	2.3
Non-University	5.9	1.8	2.7	3.0	8.6	3.3	5.1	4.8	8.6	3.2	4.4	3.9

3.4 POST-SECONDARY PARTICIPATION BY GEOGRAPHICAL LOCATION

The geographic location of a student refers to their rural/urban classification. The nature of this environment is believed to affect post-secondary plans and decisions. These choices may be influenced by the students proximity to a post-secondary institution. That is, students may be more likely to enroll in post-secondary education when an institution is located within commuting distance. Youths from rural backgrounds, particularly in isolated areas, have traditionally been under-represented in post-secondary education. As well as being distanced from the urban centers of learning, rural youths are more apt to pursue vocations which may not necessarily require post-secondary education. More recently though, decentralization of post-secondary facilities and the expansion of the college sector have increased the rural youth's opportunities for attending post-secondary education to a level never experienced before.

RURAL-URBAN TRENDS

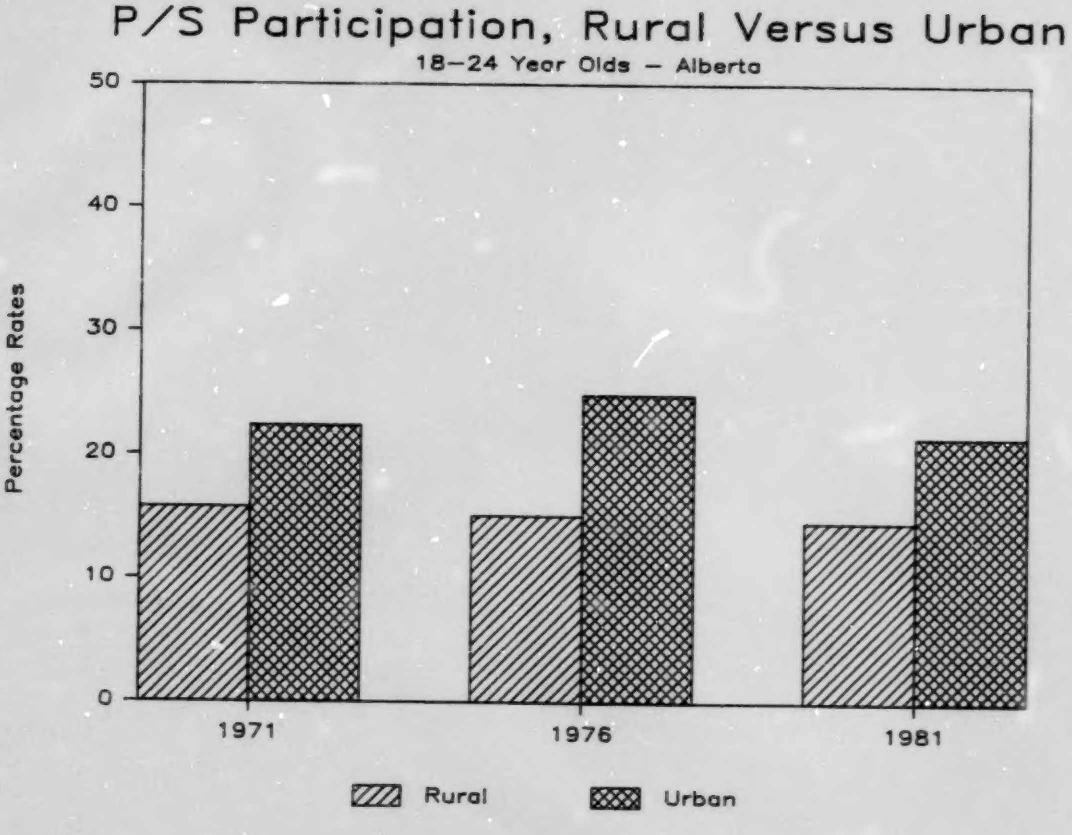
There has been little change in the patterns of participation between rural and urban students over the three census years. There has, however, been a perceptible change in the rates of participation.

- Rural and urban participation rates have decreased slightly, which may be attributed in part to a decrease in full-time participation in the university sector. The 1971-1976 period registered an increase and a subsequent decrease in 1981 for urban students.

- Part-time participation has steadily increased between 1971 and 1981 in both university and non-university studies; full-time university participation has decreased over the same period.

- In 1971, rural students participated in university twice as often as they participated in non-university studies. In 1981, their non-university participation exceeded that in the university sector. This trend exists among urban students as well, although it is not as accentuated. For more information, refer to Figure 11.

FIGURE 11


P/S Participation, Rural Versus Urban
18–24 Year Olds – Alberta
Percentage Rates
50
40
30
20
10
0
1971
1976
1981
▨ Rural
▩ Urban

SPECIFIC OBSERVATIONS (1981)

- Overall, students from urban backgrounds participate at a higher rate than their rural counterparts, in both full-time and part-time studies.

- In terms of age, the participation rates of 18-21 year olds vs 22-24 year olds follow a consistent pattern for both rural and urban students. The 22-24 year old full-time participation rates are consistently lower than those of their younger counterparts. In part-time studies, however, the rate for 22-24 year olds is significantly higher than that of the 18-21 year olds.

- Rural students are almost as likely to participate in university studies as in non-university studies. Their non-university participation rate is comparable to the urban non-university participation. Urban students registered a significantly higher participation rate in university studies than in non-university studies.

- Both rural and urban students participate in full-time studies at approximately three times the rate they participate in part-time. Thus, their distribution in part-time vs full-time is approximately the same. For more information, refer to Table 13.

TABLE 13
POST-SECONDARY PARTICIPATION BY GEOGRAPHICAL LOCATION
1971, 1976, 1981

LOCATION	AGE GROUP	POPULATION SIZE BY AGE	UNIVERSITY			NON-UNIVERSITY			TOTAL POST-SECONDARY		
			F-T	P-T	TOTAL	F-T	P-T	TOTAL	F-T	P-T	TOTAL
Rural 1971	18-21	24,045	12.4	.5	12.9	5.7	1.3	7.0	18.1	1.8	19.9
	22-24	13,835	4.7	1.0	5.7	1.2	1.7	2.9	5.9	2.7	8.6
	18-24	37,880	9.6	.7	10.3	4.1	1.5	5.6	13.7	2.2	15.9
Rural 1976	18-21	28,705	8.1	.3	8.4	7.1	2.5	9.6	15.2	2.8	18.0
	22-24	18,205	3.8	1.0	4.8	2.4	3.4	5.8	6.2	4.4	10.6
	18-24	46,905	6.5	.6	7.1	5.3	2.8	8.1	11.8	3.4	15.2
Rural 1981	18-21	33,070	6.7	1.0	7.7	7.3	2.5	9.8	14.0	3.5	17.5
	22-24	22,790	3.4	1.4	4.8	3.0	3.6	6.6	6.4	5.0	11.4
	18-24	55,775	5.4	.9	6.3	5.6	2.9	8.5	11.0	3.8	14.8
Urban 1971	18-21	84,695	17.2	1.0	18.2	5.5	2.1	7.6	22.7	3.1	25.8
	22-24	69,250	9.7	2.8	12.5	2.1	3.6	5.7	11.8	6.4	18.2
	18-24	153,950	13.8	1.8	15.6	3.9	2.8	6.7	17.7	4.6	22.3
Urban 1976	18-21	119,070	14.2	.9	15.1	8.0	3.7	11.7	22.2	4.6	26.8
	22-24	86,895	9.6	2.5	12.1	4.6	5.7	10.3	14.2	8.2	22.4
	18-24	205,960	12.2	1.6	13.8	6.6	4.5	11.1	18.8	6.1	24.9
Urban 1981	18-21	157,970	11.3	1.0	12.3	7.5	3.2	10.7	18.8	4.2	23.0
	22-24	133,835	7.8	3.6	11.4	3.9	4.6	8.5	11.7	8.2	19.9
	18-24	291,800	9.7	2.2	11.9	5.8	3.8	9.6	15.5	6.0	21.5

3.5 POST-SECONDARY PARTICIPATION BY SEX

In the past, women have been under-represented at the post-secondary level. While more females than males graduate from high school, females are less likely to continue after that point. When women do continue, they are more likely to pursue traditionally female occupations, many of them associated with low income occupations. Still, in recent years their position in the post-secondary system and in the labour force has improved immeasurably. While the results of this study do not allow us to examine fields of study or high school choices, we can infer a good deal from other information about their post-secondary participation.

TRENDS

- Males continue to participate in post-secondary studies at a higher rate than females. This trend is maintained over the ten-year period.

- Full-time participation has decreased for both sexes while part-time participation has increased. This is consistent with a general trend toward increased part-time enrolments. The exception to this is that male part-time university participation has decreased slightly over the ten-year period.

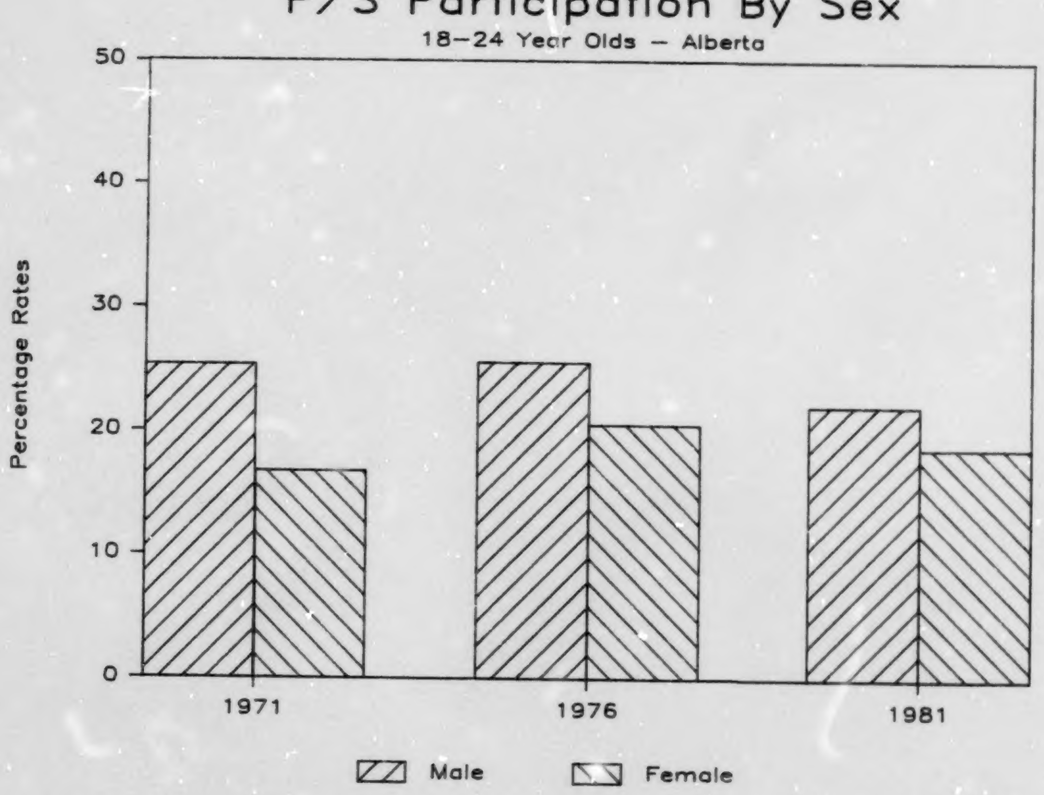
- University participation has decreased for both sexes while non-university participation has increased. This, too, is consistent with the general trend. For more information, refer to Figure 12.

SPECIFIC OBSERVATIONS (1981)

- Women participate at a slightly lower rate than do men. It is arguable whether or not this constitutes a significant lack of equality.

- The pattern of participation according to age is different for males than for females; 22-24 year old males are much more likely to attend than 22-24 year old females. This is largely due to a lower full-time participation rate by this age of females. Male and female 22-24 year olds participate in

FIGURE 12


P/S Participation By Sex
18–24 Year Olds – Alberta
Percentage Rates
50
40
30
20
10
0
1971
1976
1981
Male
Female

part-time studies at a significantly higher rate than their younger counterparts. This trend is consistent across all of the variables, however, and it is not a function of gender differences.

- Males and females appear to make similar choices with respect to sector; both participate in university studies at a significantly higher rate than non-university studies.

- Females are more likely to participate in part-time university studies than males. The reverse is true with respect to part-time non-university studies. For more information, refer to Table 14.

TABLE 14
POST-SECONDARY PARTICIPATION BY SEX
1971, 1976, 1981

SEX	AGE GROUP	POPULATION BY AGE GROUP	UNIVERSITY			NON-UNIVERSITY			TOTAL POST-SECONDARY		
			F-T	P-T	TOTAL	F-T	P-T	TOTAL	F-T	P-T	TOTAL
Female	18-21	54,350	15.1	.8	15.9	5.7	1.3	7.0	20.8	2.1	22.9
1971	22-24	42,605	4.4	2.2	6.6	1.0	1.4	2.4	5.4	3.6	9.0
	18-24	96,950	10.4	1.4	11.8	3.7	1.4	5.1	14.1	2.8	16.9
Female	18-21	72,670	12.6	.8	13.4	8.3	2.8	11.1	20.9	3.6	24.5
1976	22-24	52,580	6.2	2.5	8.7	2.8	3.6	6.4	9.0	6.1	15.1
	18-24	125,250	9.9	1.5	11.4	6.0	3.1	9.1	15.9	4.6	20.5
Female	18-21	94,075	10.8	1.1	11.9	7.5	2.4	9.9	18.3	3.5	21.8
1981	22-24	75,650	5.9	3.4	9.3	2.3	3.3	5.6	8.2	6.7	14.9
	18-24	169,725	8.6	2.2	10.8	5.2	2.8	8.0	13.8	5.0	18.8
Male	18-21	54,395	17.1	1.1	18.2	5.3	2.5	7.8	22.4	3.6	26.0
1971	22-24	40,485	13.4	2.9	16.3	3.0	5.2	8.2	16.4	8.1	24.5
	18-24	94,875	15.6	1.9	17.5	4.3	3.7	8.0	19.9	5.6	25.5
Male	18-21	75,100	13.4	.8	14.2	7.4	4.1	11.5	20.8	4.9	25.7
1976	22-24	52,520	11.0	2.0	13.0	5.7	6.9	12.6	16.7	8.9	25.6
	18-24	127,620	12.4	1.3	13.7	6.7	5.3	12.0	19.1	6.6	25.7
Male	18-21	96,880	10.3	.7	11.0	7.4	3.8	11.2	17.7	4.5	22.2
1981	22-24	80,970	8.3	3.1	11.4	5.1	5.5	10.6	13.4	8.6	22.0
	18-24	177,850	9.4	1.8	11.2	6.4	4.6	11.0	15.8	6.4	22.2

3.6 POST-SECONDARY PARTICIPATION BY BLISHEN SCALE RATING

Developed by Bernard Blishen (1967), the Blishen scale is a composite measure of the education, income and prestige of 320 occupations, based on the 1961 census. A Blishen scale rating of 70 and above is assumed to represent a high level of education, income and prestige. Examples of professions in this category include: engineers, lawyers and university professors. A Blishen scale rating of 50-69 is assumed to represent a medium level of education, income and prestige. Examples of professions in this category include: middle management occupations. A Blishen scale rating under 50 is assumed to represent a low level of education, income and prestige. Examples of professions in this category include: sales clerks, repairmen, and food service workers.

TRENDS

- There was a decrease in the participation rates for each category over the ten-year period.

- There was a significant decrease in full-time university participation for students from all three Blishen categories. This was accompanied by a significant increase in non-university participation. For more information, refer to Figure 13 and Table 15.

SPECIFIC OBSERVATIONS (1981)

- Youths from low to medium Blishen scale backgrounds tend to participate in part-time post-secondary studies more frequently than high Blishen youths.

- While high Blishen scale youths are much more likely to attend university rather than non-university institutions, lower Blishen scale youths are just about as likely to attend non-university institutions as university institutions, as shown in Table 15.

FIGURE 13

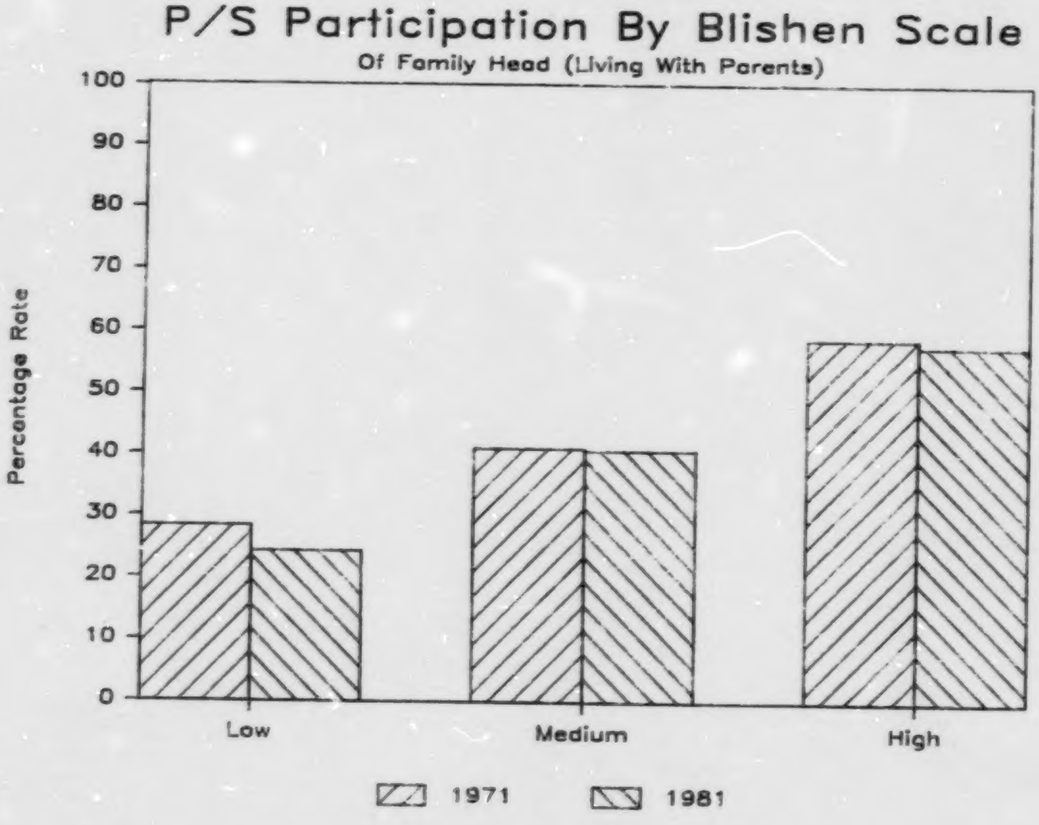

P/S Participation By Blishen Scale
Of Family Head (Living With Parents)
Percentage Rate
100
90
80
70
60
50
40
30
20
10
0
Low
Medium
High
1971
1981

TABLE 15
POST-SECONDARY PARTICIPATION BY BLISHEN SCALE OF FAMILY HEAD
(18-24 LIVING WITH PARENTS)

BLISHEN SCALE RATING	AGE GROUP	POPULATION SIZE BY AGE	UNIVERSITY			NON-UNIVERSITY			TOTAL POST-SECONDARY		
			F-T	P-T	TOTAL	F-T	P-T	TOTAL	F-T	P-T	TOTAL
	1971										
Blishen	18-21	2,565	49.1	1.8	50.9	5.3	1.4	6.7	54.4	3.2	57.6
Scale	22-24	480	60.4	3.1	63.5	3.1	1.4	4.5	63.5	4.5	68.0
70 & above	18-24	3,050	50.8	1.9	52.7	4.8	1.3	6.1	55.6	3.2	58.8
Blishen	18-21	10,320	31.9	.9	32.8	7.2	1.4	8.6	39.1	2.3	41.4
Scale	22-24	2,045	35.9	4.2	40.1	2.9	2.2	5.1	48.8	6.4	55.2
50 to 69	18-24	12,365	32.6	1.5	34.1	6.5	1.5	8.0	39.1	3.0	41.1
Blishen	18-21	43,020	19.6	.8	20.4	6.4	1.7	8.1	26.0	2.5	28.5
Scale	22-24	9,310	20.2	1.9	22.1	3.9	2.8	6.7	24.1	4.7	28.8
Under 50	18-24	52,325	19.7	1.0	20.7	5.9	1.9	7.8	25.6	2.9	28.5
	1981										
Blishen	18-21	4,885	45.3	1.7	47.0	8.7	1.3	10.0	54.0	3.0	58.0
Scale	22-24	1,265	52.6	2.0	54.6	3.2	3.2	6.4	55.8	5.2	61.0
70 & Above	18-24	6,150	46.6	1.8	48.4	7.6	1.7	9.3	54.2	3.5	57.7
Blishen	18-21	27,435	24.6	1.0	25.6	11.1	3.1	14.2	35.7	4.1	39.8
Scale	22-24	6,680	31.5	4.0	35.5	5.0	4.7	9.7	36.5	8.7	45.2
50 to 69	18-24	34,115	25.9	1.6	27.5	9.9	3.4	13.3	35.8	5.0	40.8
Blishen	18-21	52,365	11.1	.7	11.8	9.1	2.9	12.0	20.2	3.6	23.8
Scale	22-24	13,665	13.5	2.9	16.4	5.7	4.8	10.5	19.2	7.7	26.9
Under 50	18-24	66,035	11.6	1.1	12.7	8.4	3.3	11.7	20.0	4.4	24.4

3.7 POST-SECONDARY PARTICIPATION BY HIGHEST LEVEL OF PARENTAL EDUCATION

The level of parental education is thought to be the most influential of the socioeconomic variables operative in post-secondary choice. Parental education may shape educational aspirations by both subtle and obvious means; through early socialization patterns and by the availability of financial resources. The more subtle influences are difficult to assess in a study of this nature; it is impossible to ascertain which sex of parent had an effect on which sex of child, etc. While results were obtained on both mother's and father's educational levels, the differences were not striking enough to justify their separate analysis.

TRENDS

- The participation rate has decreased in all parental education categories except for the lowest and the highest levels, where the participation rate remained constant.

- The 'gap' between the participation rates of students from the lowest and highest levels of parental education remained constant.

- University participation, full-time and part-time, has decreased considerably; non-university participation has increased for all educational levels. For more information, refer to Figure 14 and Table 16.

SPECIFIC OBSERVATIONS (1981)

- As the level of parent's education increases, so does the likelihood of the child attending university studies rather than non-university studies.

FIGURE 14

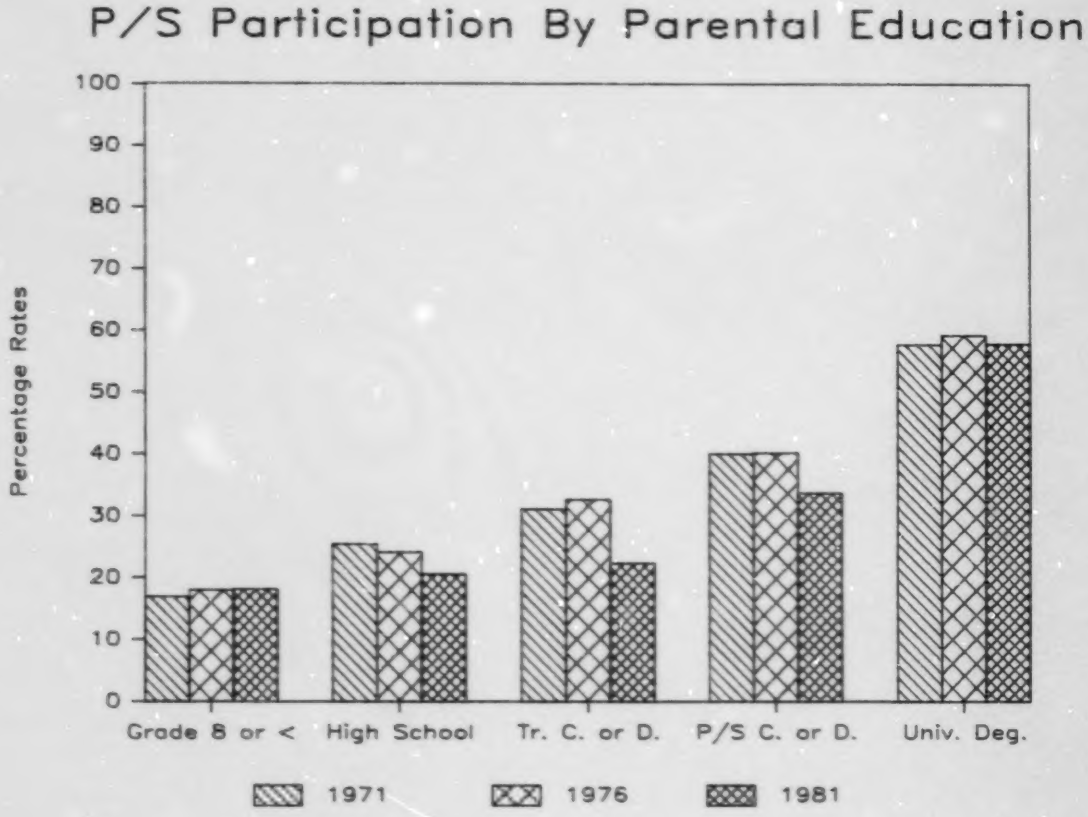

P/S Participation By Parental Education
Percentage Rates
100
90
80
70
60
50
40
30
20
10
0
Grade 8 or <
High School
Tr. C. or D.
P/S C. or D.
Univ. Deg.
1971
1976
1981

TABLE 16
POST-SECONDARY PARTICIPATION BY HIGHEST LEVEL OF PARENTAL EDUCATION
(18-24 LIVING WITH PARENTS)

HIGHEST LEVEL OF PARENTAL EDUCATION	YEAR	POPULATION SIZE BY AGE 18-24	UNIVERSITY			NON-UNIVERSITY			TOTAL POST-SECONDARY		
			F-T	P-T	TOTAL	F-T	P-T	TOTAL	F-T	P-T	TOTAL
Grade 8 or Less	1971	14,865	10.5	.6	11.1	4.7	1.2	5.9	15.2	1.8	17.0
	1976	13,330	8.0	.6	8.6	6.6	2.9	9.5	14.6	3.5	18.1
	1981	12,400	8.4	.9	9.3	6.1	2.8	8.9	14.5	3.7	18.2
High School	1971	29,000	16.9	.8	17.7	5.9	1.9	7.8	22.8	2.7	25.5
	1976	37,230	12.9	.8	13.7	7.4	3.1	10.5	20.3	3.9	24.2
	1981	36,225	9.5	.8	10.3	7.4	3.0	10.4	16.9	3.8	20.7
Trade Certificate or Diploma	1971	7,010	21.8	1.1	22.9	6.2	2.1	8.3	28.0	3.2	31.2
	1976	8,605	13.6	1.0	19.6	8.7	4.4	13.1	27.3	5.4	32.7
	1981	5,920	10.8	1.1	11.9	7.0	3.5	10.5	17.8	4.6	22.4
Post-Sec. Certificate or Diploma	1971	19,500	29.0	1.8	30.8	7.2	2.1	9.3	36.2	3.9	40.1
	1976	22,525	24.0	1.2	25.2	11.2	3.9	15.1	35.2	5.1	40.3
	1981	45,400	17.6	1.4	19.0	10.8	4.0	14.8	28.4	5.4	33.8
University Degree	1971	6,600	50.8	1.7	52.5	4.0	1.3	5.3	54.8	3.0	57.8
	1976	10,330	45.9	1.7	47.6	9.5	2.2	11.7	55.4	3.9	59.3
	1981	15,725	45.8	2.4	48.2	7.7	1.8	9.5	53.5	4.2	57.9

3.8 POST-SECONDARY PARTICIPATION BY FAMILY INCOME

Socioeconomic background is often perceived to be the primary determinant of post-secondary aspirations and choices. Socioeconomic status is a composite measure of family income, parental occupation, and parental education. Some studies cite evidence that family income may be the least influential of these socioeconomic variables. It is, nevertheless a powerful factor in post-secondary decision-making process. It will come as no surprise, then, that the likelihood of post-secondary participation increases with the level of family income.

TRENDS

- The overall participation rate decreased slightly in all income categories. This may indicate that the general trend of reduced participation is not affected by the level of family income.

- Participation in non-university education has increased over the ten-year period for all income levels while university participation decreased. This too is a reflection of the general trend.

- While there has been a slight decrease in participation overall, the 'gap' between the participation rates of students coming from the lowest and highest levels of family income decreased over the period 1971-1981. For more information, refer to Figure 15 and Table 17.

SPECIFIC OBSERVATIONS (1981)

- Post-secondary participation increases in relation to family income. This is particularly evident in the full-time participation rates, which double between the lowest level of income and the highest level of income.

- Students from lower income families are nearly as likely to participate in university education as in non-university education. High income students, on the other hand, are much more likely to attend university than non-university institutions, as shown in Table 17.

FIGURE 15

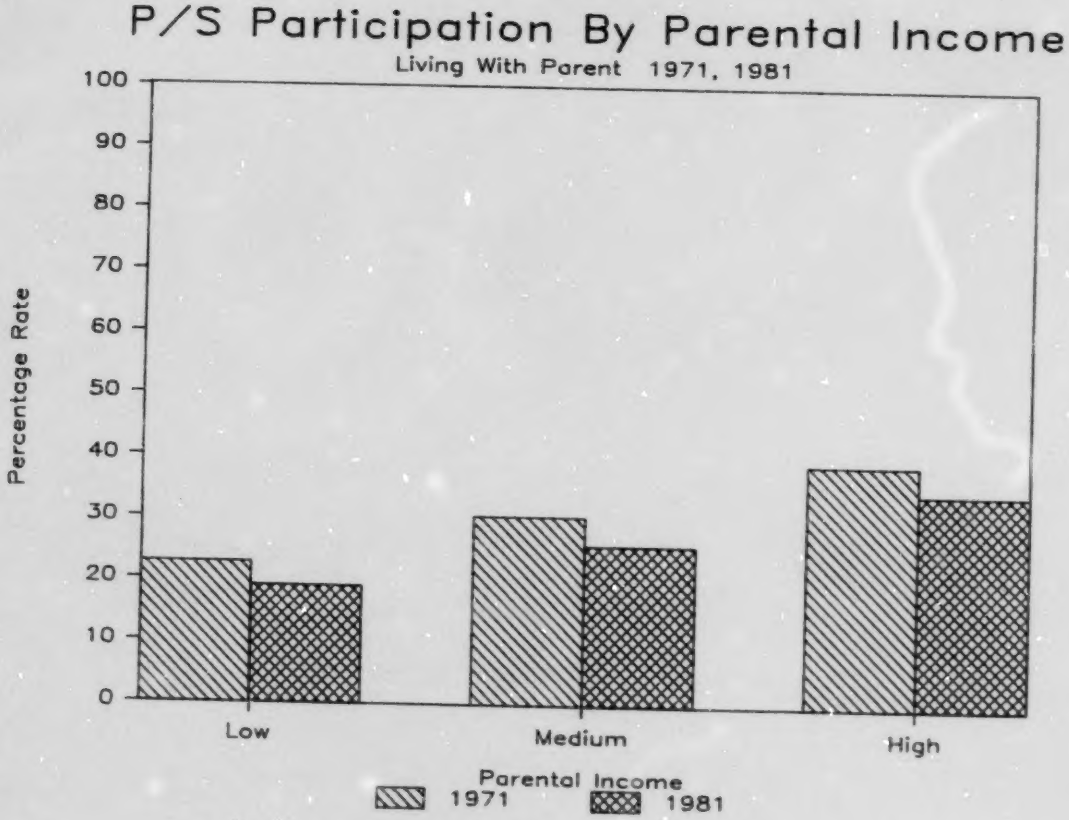

P/S Participation By Parental Income
Living With Parent 1971, 1981
Percentage Rate
100
90
80
70
60
50
40
30
20
10
0
Low
Medium
High
Parental Income
▧ 1971
▩ 1981

TABLE 17
POST-SECONDARY PARTICIPATION BY FAMILY INCOME (1971 DOLLARS)
(18-24 LIVING WITH PARENTS)

CENSUS FAMILY INCOME	AGE GROUP	POPULATION SIZE BY AGE	UNIVERSITY			NON-UNIVERSITY			TOTAL POST-SECONDARY		
			F-T	P-T	TOTAL	F-T	P-T	TOTAL	F-T	P-T	TOTAL
	1971										
Less than $5,000	18-24	11,900	13.5	.4	13.9	6.1	1.4	7.5	19.6	1.8	21.4
$5,000 to $7,999	18-24	11,100	15.4	.7	16.1	6.6	1.6	8.2	22.0	2.3	24.3
$8,000 to $11,999	18-24	18,345	19.9	1.1	21.0	6.3	1.6	7.9	26.2	2.7	28.9
$12,000 to $14,999	18-24	12,280	23.9	1.2	25.1	5.8	1.9	7.7	29.7	3.1	32.8
$15,000 to $19,999	18-24	12,740	25.4	1.5	26.9	5.2	2.3	7.5	30.6	3.8	34.4
$20,000 and Over	18-24	10,605	36.4	1.7	38.1	4.9	2.0	6.9	41.3	3.7	45.0
	1981										
Less Than $5000	18-24	6,760	8.3	.7	9.0	6.4	1.9	8.3	14.7	2.6	17.3
$5,000 to $7,999	18-24	7,720	9.3	1.0	10.3	8.1	2.3	10.4	17.4	3.3	20.7
$8,000 to $11,999	18-24	13,700	12.8	1.2	14.0	8.3	2.7	11.0	21.1	3.9	25.0
$12,000 to $14,999	18-24	13,015	14.0	1.0	15.0	8.7	3.1	11.8	22.7	4.1	26.8
$15,000 to $19,999	18-24	23,780	15.9	1.1	17.0	9.8	3.4	13.2	25.7	4.5	30.2
$20,000 and Over	18-24	50,680	22.8	1.6	24.4	8.6	3.6	12.2	31.4	5.2	36.6

3.9 POST-SECONDARY PARTICIPATION BY MOTHER TONGUE OF FAMILY HEAD

Ethnic affiliation is believed to affect educational aspirations. Since different ethnic groups are associated with different economic and social strata, it is only natural that this might affect the level of educational aspiration. By using 'mother tongue' as a proxy for ethnicity we are able to examine the extent of this cultural influence upon participation rates.

TRENDS

- The participation rate of Natives continued to be significantly lower than other groups but rose considerably over the ten-year period.

- The overall participation rate of the students from German mother tongue background increased significantly between 1971-1981.

- While students from English and Ukrainian backgrounds registered a slight decrease in their participation rates, all of the other ethnic groups showed an increase in participation.

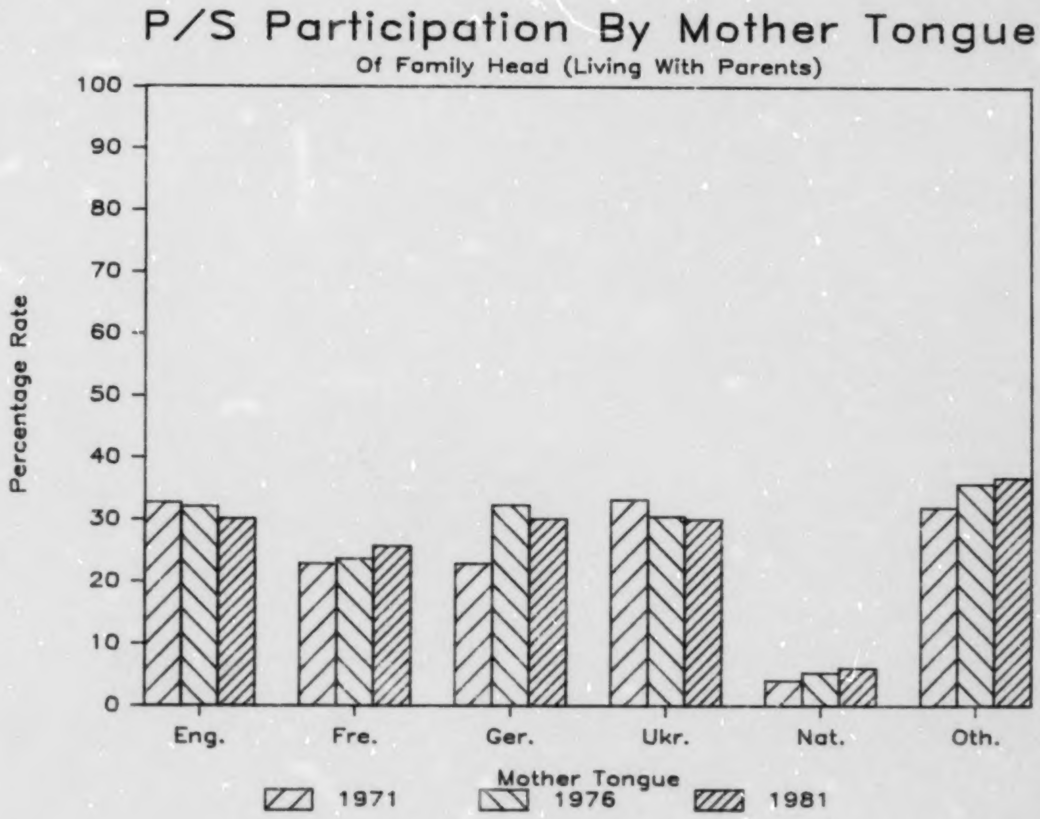
- The overall participation in university studies decreased for all ethnic groups except for Natives. This is a reflection of the general trend away from the university sector.

- Part-time participation rates have increased for all mother tongue groups. This is reflective of the general trend. For more information, refer to Figure 16 and Table 18.

SPECIFIC OBSERVATIONS (1981)

- Students from English, Ukrainian and German backgrounds participated at an equally high rate. This is of particular interest since other studies typically report a substantial lead in education attainment by English groups and significantly lower attainment levels among the Slavic language group youths.

FIGURE 16


P/S Participation By Mother Tongue
Of Family Head (Living With Parents)
Percentage Rate
100
90
80
70
60
50
40
30
20
10
0
Eng.
Fre.
Ger.
Ukr.
Nat.
Oth.
Mother Tongue
1971
1976
1981

- Although the difference is not considered to be significant, students whose mother tongue is French participate at a lower rate than their counterparts whose parents' mother tongue is English, German or Ukrainian. This may be a function of their higher concentration in rural areas.

- Those students from an English background participated more frequently in full-time post-secondary studies than German and Ukrainian students. The reverse was true for part-time studies.

- Of these five distinct ethnic groups (excluding 'Other') the Ukrainians registered the highest participation rate in university studies. The German mother tongue group registered the highest rate in non-university studies. For more information, refer to Table 18.

TABLE 18
POST-SECONDARY PARTICIPATION BY MOTHER TONGUE OF PARENTS
(LIVING WITH PARENTS, 18-24)
ALBERTA

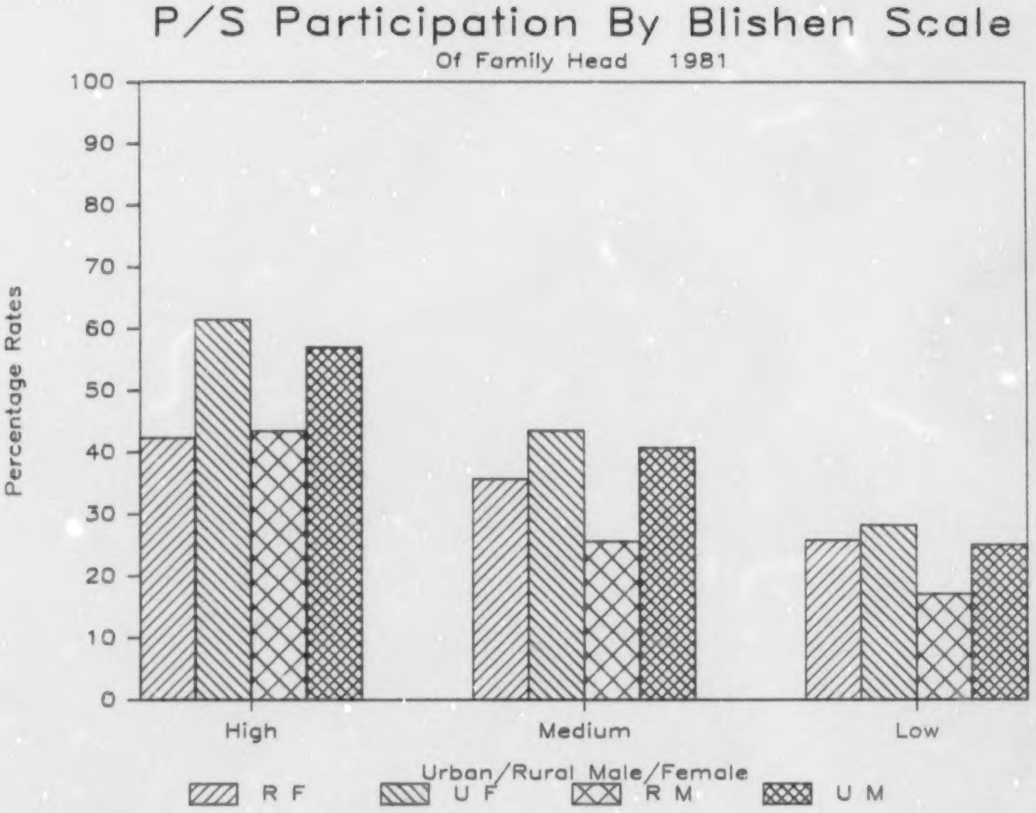
MOTHER TONGUE	CENSUS YEAR	POPULATION SIZE BY AGE 18-24	UNIVERSITY			NON-UNIVERSITY			TOTAL POST-SECONDARY		
			F-T	P-T	TOTAL	F-T	P-T	TOTAL	F-T	P-T	TOTAL
English	1971	51,325	24.0	1.2	25.2	5.8	1.8	7.6	29.8	3.0	32.8
	1876	65,105	19.6	1.0	20.6	8.4	3.2	11.6	28.0	4.2	32.2
	1981	75,595	17.4	1.2	18.6	8.7	2.9	11.6	26.1	4.1	30.2
French	1971	2,930	14.7	1.4	16.2	5.3	1.5	6.8	20.0	2.9	23.0
	1976	2,965	11.6	.8	12.4	7.8	3.5	11.3	19.4	4.3	23.7
	1981	4,095	11.7	1.4	13.1	8.5	4.2	12.7	20.2	5.6	25.8
German	1971	6,665	14.3	.8	15.1	6.2	1.7	7.9	20.5	[illegible]	22.0
	1976	6,755	17.3	.7	18.0	10.5	3.9	14.4	27.8	4.6	32.4
	1981	9,385	15.1	1.4	16.5	8.9	4.8	13.7	24.0	6.2	30.2
Ukrainian	1971	5,425	24.3	.8	25.1	6.6	1.6	8.2	30.9	2.4	33.3
	1976	5,625	17.7	1.2	18.9	7.9	3.8	11.7	25.6	5.0	30.6
	1981	7,155	17.6	1.5	19.1	7.8	3.2	11.0	25.4	4.7	30.1
Native	1971	2,000	1.3	-	1.3	2.3	.5	2.8	3.6	.5	4.1
	1976	1,020	-	-	-	4.4	1.0	5.4	4.4	1.0	5.4
	1981	2,025	1.2	.7	1.9	2.7	1.5	4.2	3.9	2.2	6.1
Other	1971	8,630	22.4	.9	23.3	6.4	2.4	8.8	28.8	3.3	32.1
	1976	10,560	22.0	1.4	23.4	9.2	3.3	12.5	31.2	4.7	35.9
	1981	17,400	22.3	1.6	23.9	9.4	3.6	13.0	31.7	5.2	36.9

3.10 PARTICIPATION BY BLISHEN SCALE, SEX AND GEOGRAPHICAL LOCATION

For the most part, the trends discussed in the separate analysis of these variables are confirmed by their correlation as shown in Figure 17. In 1981, urban females registered the highest participation rates in all the categories while rural males participated at a significantly lower rate in the medium and low Blishen categories. An interesting exception to this trend is the participation rate of rural males in the high Blishen scale category. Here the rural male rate slightly exceeds that of the rural female. We can perhaps infer from this that rural males in a high Blishen category may be influenced more by socioeconomic status of parents than by geographical location.

In the census years of 1971 and 1981 the gap between urban and rural female participation rates increased and shifted in favor of urban female participation in the high Blishen category. The reverse was true for low Blishen urban/rural female participation with the gap decreasing in favor of urban female participation in 1981. In all other cases the data reflect very little change in 1971-81 trends, with exception of an overall decrease in participation rates.

FIGURE 17


P/S Participation By Blishen Scale
Of Family Head 1981
Percentage Rates
100
90
80
70
60
50
40
30
20
10
0
High
Medium
Low
Urban/Rural Male/Female
R F
U F
R M
U M

3.11 PARTICIPATION BY MOTHER TONGUE, SEX AND GEOGRAPHICAL LOCATION

It is of some interest to examine the mother tongue variable in conjunction with rural/urban participation and participation by sex.

For the most part, the trends discussed in the separate analysis of these variables are reaffirmed as shown in Figures 18 and 19.

Rural males have consistently lower rates of participation while urban females register consistently high rates of participation. The exception to this is the Native mother tongue group where the urban female rate is lower than the rural female rate. This is probably due to the small size of the sample and may also be affected by unique rural/urban population distribution among Natives.

The participation rate of rural females from a French mother tongue background is significantly lower than the other rural female participation rates. The participation rate for rural males from a German mother tongue background is relatively high. This is significant given the fact that rural males tend to be the most disadvantaged of these four groups.

French, German and Native urban males have all increased their participation rates between 1971 and 1981. The most significant gains in participation rates were made by the German mother tongue group; irrespective of geographic location or sex. There was a significant increase in the gap between rural and urban participation between 1971 and 1981 for the English, French and Ukranian mother tongue groups, showing decreased participation among rural females.

FIGURE 18

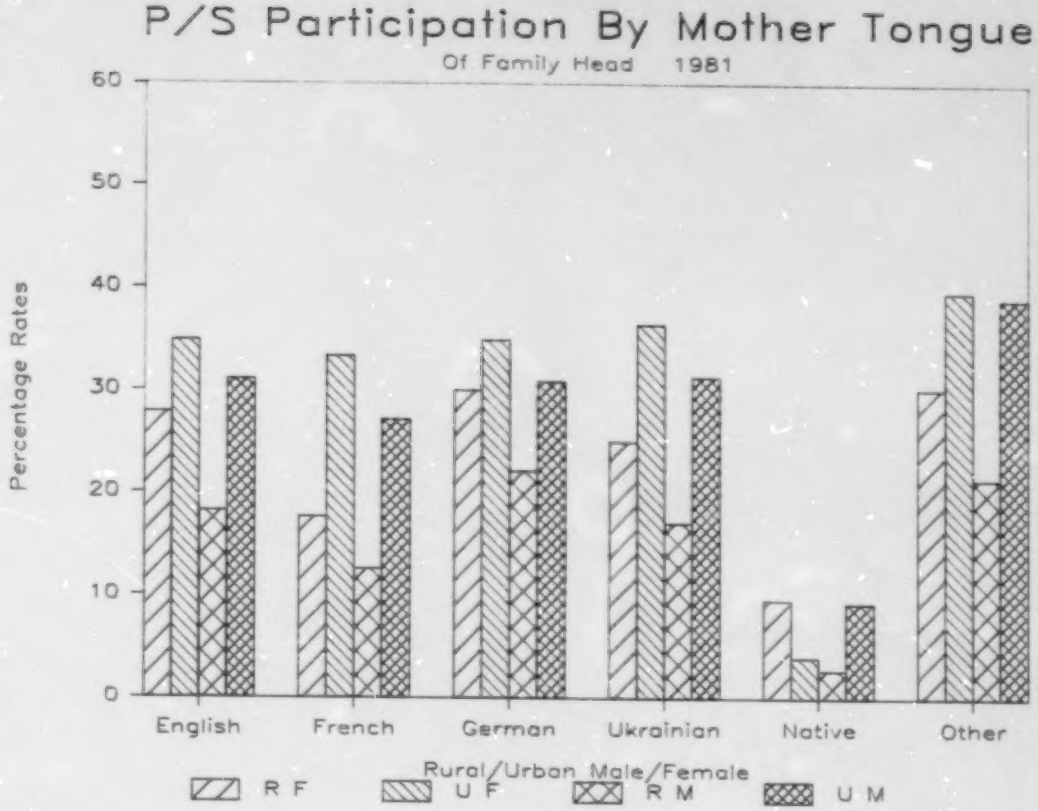
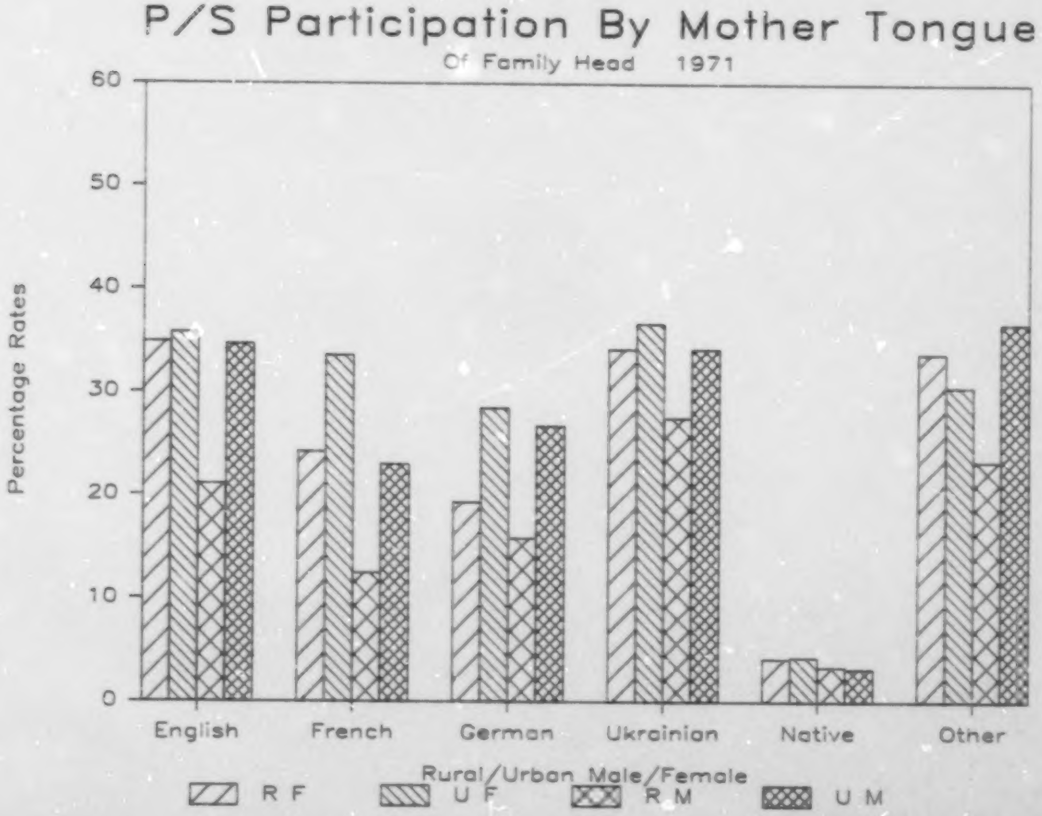


FIGURE 19

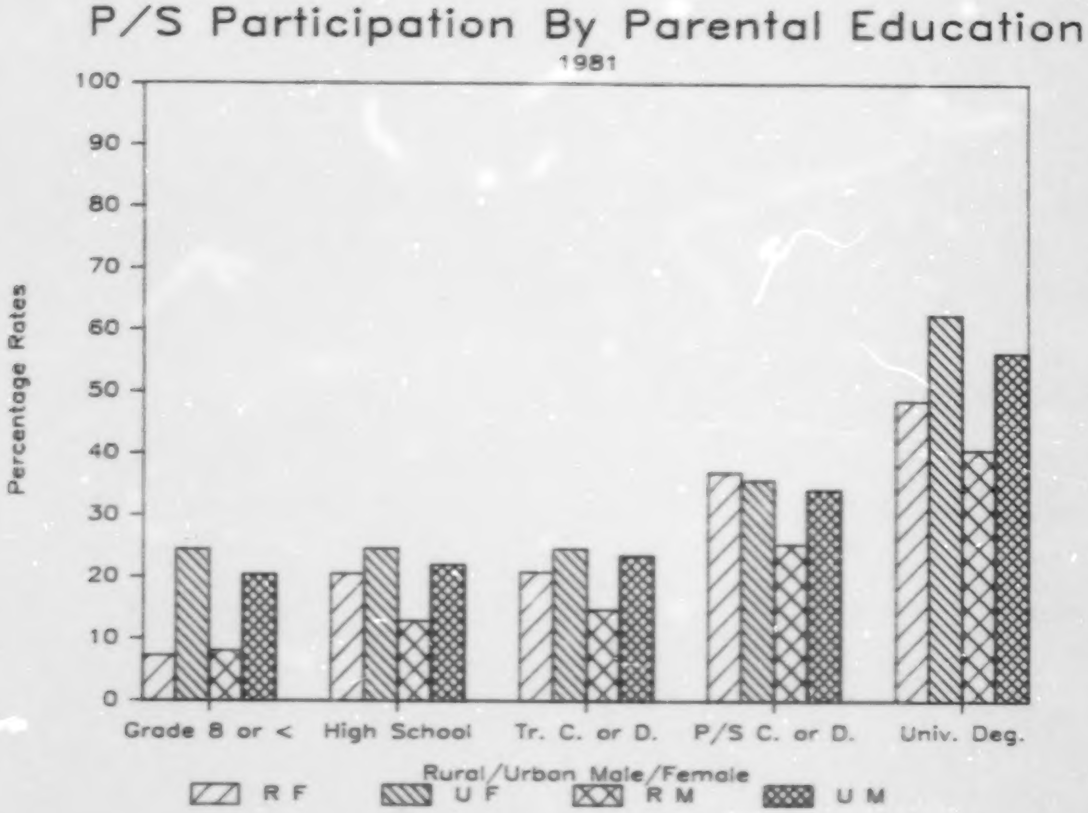


3.12 PARTICIPATION BY PARENTAL EDUCATION, SEX AND GEOGRAPHIC LOCATION (1981)

The trends demonstrated by Figure 20 are consistent with those found in the separate analysis of these variables. That is, post-secondary participation increases in relation to parental education; urban participation rates exceed rural participation rates.

Rural males register the lowest participation rates in every category with the exception of the 'Grade 8 or less' category. Urban females consistently register the highest participation rate, with the exception of the post-secondary certificate or diploma category, where the rural female participation rate is higher.

FIGURE 20



Tr. C. or D.= Trade Certificate or Diploma

P.S C. or D.= Post-Secondary Certificate or Diploma

Univ. Deg. = University Degree

V CONCLUSIONS

SUMMARY AND CONCLUSIONS

In concluding a document of this nature, it is perhaps useful to review the mandate of the study and the objectives of the report. The mandate of the study was to "determine participation trends amongst broad groups based on gender, cultural and socio-economic backgrounds and rural/urban residency." This was accomplished through the examination of trends over a ten year period; the results represent a statistical rendering of participation rates in Alberta post-secondary institutions. The objectives of the report were twofold: presentation and interpretation. The literature review was designed to provide a context for the study and the results section presents the primary analysis of the data. In terms of interpretation, the report has certain limitations. While the results provide a clear picture of who attends post-secondary education, they do not provide information about how these choices were made. Again, the conclusions to be drawn from a participation study are at variance with those to be drawn from an accessibility study. There is, however, a certain amount of inferential interpretation which may be applied to the report from the results and from what is known about trends outside Alberta.

With respect to Type I accessibility, or enrolment growth, the system has experienced phenomenal increases during the decade covered by the study. Alberta has enjoyed an extremely high level of post-secondary attendance, despite the number of desirable alternatives available in the labour force. While growth occurred in every sector of the system, the most dramatic increases were evident in the non-university sector. Other striking examples of system growth include part-time studies, apprenticeship training and non-credit enrolments. These increases attest to a high level of diversity and interest in the system.

With respect to participation rates, the results are fairly consistent with the patterns established by other studies. Students from more advantaged backgrounds are more likely to attend post-secondary institutions than students from disadvantaged backgrounds. This is particularly evident with respect to the level of parental education, level of family income and parental Blishen scale rating. In the case of "mother tongue", our proxy for ethnicity, there have been significant gains made by groups other than the traditionally predominant English group. The Native mother tongue group has nearly doubled their participation rate over the ten year period and the German mother tongue group has also experienced a significant increase over the same time period. There is some similarity in the trends in participation for geographical location and gender. In both instances, the traditionally disadvantaged groups, rural students and female students, have increased participation for those students living at home.

Perhaps the most striking finding of the results is a general overall decrease in participation rates. Although the amount of decrease is not substantial, it is nevertheless a trend worthy of comment and interpretation. There are suggested reasons for this drop in participation which may be unique to Alberta. Alberta has, over the last decade, experienced an extremely high rate of in-migration. Given the information we have about the characteristics of migrants, there is reason to believe that their primary motivation in coming to the province was not to attend post-secondary education but rather to accept or seek employment. Thus, their influx has inflated the population size of the 18-24 age group without an accompanying increase in post-secondary participation. The other mitigating circumstance affecting post-secondary participation in Alberta is that of labour force participation. For instance, Albertan females reported the second highest labour force participation rate in the country for 1981. The apprenticeship training program is another striking example of joint education and labour force activity in the province. Between 1971-72 and 1982-83, apprenticeship registrations have increased from 8,599 to 21,647, or 152%. During the years under consideration for this study, Alberta has had one of the highest labour force participation rates in the country. Apparently this has been seen by many youths as a viable alternative to post-secondary participation. This discussion highlights a critical notion in any participation study. The assumption that people benefit from participating in some form of post-secondary studies is for the most part a positive assumption. It is not entirely realistic, however, to assume that this is the only solution to career advancement. A majority of secondary school students enter directly into the labour force. Provided this decision is an informed one, and made with an awareness of the broad range of available choices and options, it is no less valid.

A decrease in participation rates is a trend which is currently being witnessed nation-wide as well as throughout the western world. In the OECD report "Policies for Higher Education in the 1980's", the authors state:

> After a period of steady growth in enrolments, a number of countries are now witnessing a serious slowdown in the growth of demand for higher education; and in some cases an actual decline in levels of participation, at least in certain sectors of the system (OECD, 1983 P.14).

In Canada, the decreases in participation rates have been particularilly evident in the university sector. Between 1971 and 1981, 18-21 year old university participation rates decreased by 2.1% at the same time as non-university participation increased by 5.4%. Demographic forecasts suggest that the size of the 18-24 age group will continue to decrease in the future, further depleting the traditional pool of applicants for post-secondary education. While demographic forecasts predict declining enrolments under ordinary circumstances, instability in labour market opportunities may continue to drive post-secondary enrolments up beyond anticipated levels. This trend is evident in Alberta, where 1982-1984 enrolments have been rising steadily, due to reduced labour market opportunities. These trends may have implications for accessibility policies and participation patterns. In terms of accessibility, it may be of interest to monitor the relative participation of certain disadvantaged groups as enrolments continue to fluctuate for the traditional age cohort. In terms of participation patterns, it will be interesting to monitor the emergence of new groups which may displace the traditional participants in post-secondary education.

These new groups, or new types of participation include increased participation by 22-24 year olds, part-time students, mature students and those enrolled in the non-university sector. While the participation rates of mature students are not within the scope of the study, they must be acknowledged as an ever-growing proportion of post-secondary enrolments. The growth in participation by these groups has encouraging implications for accessibility.

The positive aspects of the last decade's growth are particularly evident in the non-university sector of the system. First, and most important, youths from less advantaged backgrounds have increased their participation in the non-university sector significantly during the time period surveyed. As universities have experienced a decline in relative proportion during 1971-81, colleges and technical institutes have increased their share of the post-secondary population. It is not only youths from less advantaged backgrounds who have accessed non-university education. Students who may have attended some institution in any case have chosen an alternative to the university. As a result, the colleges and technical institutes serve a broader socioeconomic mix of students than the universities. Thus, not only has this sector made post-secondary education more accessible to students who otherwise might have not attended, it also presents a broader range of choice to all students considering a continuation of their education. The growth of apprenticeship training programs, vocational centres and Further Education Councils attest to increased participation in varied forms of education by highly diverse groups of people. Clearly, there is a diversity in terms of choice of programs and level of schooling, and concurrent accessing of these opportunities by Albertans.

With respect to participation rates, and thus indirectly accessibility; the system has both achievements and shortcomings to its credit. The socioeconomic mix of students attending post-secondary education has not changed appreciably over the last decade; students from economically and educationally advantaged families still attend at a much higher rate than their disadvantaged peers. At the same time, there are several groups which have made substantial gains over the last decade: Native students, German students, females, rural students, older students, and non-university students have all increased their participation at the post-secondary level. Accessibility policy has enjoyed qualified success in Alberta. However, disparity among socioeconomic groups still exists, and is of continuing concern to policy makers.

Given that accessibility and the attendant policies are under serious stress at the present time, it becomes even more critical to evaluate and subsequently, reaffirm the importance of post-secondary participation. As previously discussed, post-secondary education is facing new issues and concerns in the eighties. During this time of economic restraint we are expected to reduce our financial expectations. The rising costs of post-secondary education and concerns with the quality of that education form the arguments against the policy of accessibility. At present, there appears to be a strong relationship between economic recession and increased enrolments. If we refuse to accommodate these students, they may experience a more undesirable consequence: that of being unemployed. Post-secondary education, on the other hand, is a positive experience for the participant and has a potential payoff to society during economic recovery.

The potential losses from not continuing the pursuit of accessibility as a policy are great. Those groups who are presently underrepresented in post-secondary education may stand to lose the most from restricted access policies. Less encouragement to attend post-secondary institutions may only widen the gap between the advantaged and disadvantaged sectors of society.

Accessibility and its attendant policies seem to be assured of having a place in the lively debate surrounding equality and education for many years to come. The OECD report, Policies For Higher Education in the 1980's suggest that "even in countries which foresee a decline in enrolments or where total demand for higher education is expected to be met, access will remain an area of tension and social conflict and therefore a major political issue." (OECD, 1983, p.26). The report also suggests that the two major future trends related to access will involve accommodating new groups and planning for the different roles of post-secondary education in the economy and society. In Alberta, this trend is evident in new initiatives such as the Native Studies program recently approved by the University of Alberta. This program will attempt to serve a group which has, in the past, participated at a lower rate.

It is apparent that the accessibility debate by scholars and policy makers will continue to be significant, contentious and engaging. The debate is likely to continue to focus on considerations of equity and equality. The orientation, however, may also reflect a stronger emphasis on efficiency and more precise diagnosis of socioeconomic group differences in dealing with matters of accessibility. The accessibility debate, as it has been applied to education, may also include concerted efforts in facilitating the integral links with employers and other social institutions. The argument for a commitment to accessibility still stands; it has helped serve the needs of citizens in the past and will continue to do so in the future. It is important that we do not allow current stress to erode the philosophical basis of a policy which benefits Albertans qualified and motivated to participate in post-secondary education.

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3

PARTICIPATION PATTERNS STUDY

Report of the Committee
to Examine Participation Trends
of Alberta Post-Secondary Students

APPENDICES

JUNE 1984

Alberta
ADVANCED EDUCATION

PARTICIPATION PATTERNS STUDY

REPORT OF THE COMMITTEE
TO EXAMINE
PARTICIPATION TRENDS OF ALBERTA
POST-SECONDARY STUDENTS

APPENDICES

JUNE, 1984

Alberta
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PLANNING SECRETARIAT

APPENDICES

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APPENDIX I

POPULATION COVERAGE: LIVING ARRANGEMENTS AND AGE OF STUDENTS

The data indicate that there was a trend towards "not living at home" from 1971 to 1981. (See Table I.1). In 1981, 66.7% of the 18-24 age group were reported as not living at home compared to 60.2% in 1971. The trend was concentrated in the 18-21 age group where the percentage not living at home increased from 42.4% of all 18-21 year olds in 1971 to 52.2% in 1981. A higher proportion of females than males reported not living at home in both 1971 and 1981.

TABLE I.1

% DISTRIBUTION OF POPULATION AGED 18-24

	1971		1981	
	Living at Home	Not Living at Home	Living at Home	Not Living at Home
18-24				
Urban	35.8	64.2	30.6	69.4
Rural	55.8	44.2	47.5	52.5
18-24				
Male	47.2	52.8	39.6	60.4
Female	29.3	70.7	26.6	73.4
Age				
18-21	57.6	42.4	47.8	52.2
22-24	16.5	83.5	15.6	84.4
18-24	39.8	60.2	33.3	66.7

Details on the distribution for the three years, 1971, 1976 and 1981 by type of living arrangement are given in Appendix III.

Attention must now be given to the sub-group of the 18-24 age population who reported that they were attending P.S.E. How much do the two groups of students living at home and those not living at home, differ from each other?

In 1981 fewer students reported that they were living at home than did so in 1971, the same trend as for the 18-24 population as a whole. A greater proportion of students (18-24) are reported as living at home than the general 18-24 population, as might be expected (see Table I.2). Nearly 50.0% of students were reported as living at home compared with a third of the general 18-24 population.

TABLE I.2

STUDENT AND GENERAL POPULATION 18-24 BY LIVING ARRANGEMENT IN 1981

(% DISTRIBUTION)

	Living at Home	Not Living at Home
18-24 Age Population	33.3	66.7
18-24 Students*	49.9	50.1

*Full- and part-time at P.S.E. institutions.

Any differences between the two groups of students, by living arrangement, can only be identified for the three individual variables for which data on both groups are available. A comparison for the two groups between 1971 and 1981 is given in Table 1.3 [the complete table with frequency and percentage distribution and including 1976 is given in Appendix IV].

TABLE I.3
% DISTRIBUTION OF STUDENTS ATTENDING P.S.E.,
FULL-TIME AND PART-TIME BY LIVING ARRANGEMENT
(1971 and 1981)

	1971		1981	
	Living at Home	Not Living at Home	Living at Home	Not Living at Home
18-24				
Urban	54.5	45.5	47.6	52.4
Rural	82.5	17.5	67.1	32.9
18-24				
Male	58.7	41.3	51.2	48.8
Female	58.5	41.5	48.1	51.9
Age				
18-21	72.9	27.1	65.1	34.9
22-24	31.2	68.8	27.8	72.2
18-24	58.7	41.3	49.9	50.1

As Table I.3 indicates there was a trend towards students being reported as not living at home. This trend was most marked for the younger age group, 18-21, where the percentage of students 18-21 reported as living at home declined to 65.1% from 72.9% in 1971. For the 18-24 year olds nearly 60% lived at home in 1971 while only 50% did so in 1981. Thus data on the family variables for 18-21 students attending P.S.E. full and part-time would account for nearly 73% of 18-21 year old students in 1971 but for only 65.1% in 1981.

It has been noted that the data on rural residence should be treated with caution. That is, some students from a rural area who are classified as "not living at home" will almost certainly end up in the urban "not living at home" category. The classification does not indicate whether the student grew up in a rural or an urban area.

Without further information it is difficult to know why the rural living at home category should have changed so much between 1971 and 1981. While there were different types of responses in the censuses due to differences in the questions and guidelines, it is difficult to know why there should be any differences in the reporting between urban-rural households.

By 1981 a higher percentage of rural students were reported as not living at home (32.9%) than ten years before (17.5%). The percentages, however, remain below those of the urban living at home group in both years.

For the 18-24 age group as a whole more females than males are reported as not living at home. In the student group, 18-24, there is much less difference between males and females.

If only full-time students are considered the percentage of students who are reported as living at home tends, as might be expected, to be higher. For full-time students there was a tendency to move into the not living at home category between 1971 and 1976 but there was a slight increase in the percentage of such students reported as living at home in 1981 from 1976. (For full-time students 18-21, the percentage "living at home" moves from 68% in 1976 to 70% in 1981). [See Table I.4].

TABLE I.4
DISTRIBUTION
PERCENTAGE OF FULL-TIME STUDENTS ATTENDING P.S.E. BY
LIVING AT HOME/NOT LIVING AT HOME BY AGE

	1971		1976		1981	
	Living at Home	Not Living at Home	Living at Home	Not Living at Home	Living at Home	Not Living at Home
18-21	75.8	24.2	67.9	32.1	69.9	30.1
18-24	66.1	33.9	57.5	42.5	58.8	41.2

In summary, for full-time students at P.S.E. institutions in 1981 58.8% of the 18-24 group and 69.9% of the 18-21 group were "living at home". Details are given in Appendix V.

Table I.5 examines the extent to which living arrangements vary by the type of post-secondary institution attended for full-time students. Nearly 70% of full-time university students "live at home" compared to just less than 50.0% of non-university students. Over half of the students who were reported as living at home attended university.

TABLE I.5
NUMBER AND PERCENTAGE DISTRIBUTION OF STUDENTS 18-24
BY TYPE OF INSTITUTION, BY LIVING ARRANGEMENT
1981 (Full-Time Students)

	University	Non-University	University and Non-University	Total
Living at Home	16,560 (54.8) (69.4)	9,995 (33.1) (49.6)	3,370 (12.1) (49.8)	30,225
Not Living at Home	7,315 (34.6) (30.6)	10,145 (47.9) (50.4)	3,705 (17.5) (50.2)	21,165
Total	23,875	20,140	7,375	51,390

This suggests that, to a limited extent, the data on students living at home can be used, with caution, to explore the characteristics of full-time university students in 1981. This sub-group constitutes 69.4% of all 18-24 university students.* The study can, however, make no analysis or comment on the 30.6% of full-time university students, aged 18-24, who are reported as "not living at home" except by using the individual variables of age, sex, and to a limited extent, urban-rural residence.

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* Note that all of the discussion relates to students 18-24. A further limitation is that 25% to 30% of students of P.S.E. institutions are 25 years of age or older. They are not included in the study.

As might be anticipated living arrangement appears to be linked to the age of the student.

Table I.6 looks at the living arrangement by the age of the student for full-time university students. Virtually 80% of all full-time students between the ages of 18-21 are reported as living at home. The percentage drops to under 50% for those aged 22-24.

This would suggest that analysis using the family variables, for full-time university students aged 18-21, may give a fairly reliable picture of this sub-group of post-secondary students.

TABLE I.6

FULL-TIME UNIVERSITY ATTENDANCE, BY AGE AND LIVING ARRANGEMENT, 1981

	18-21	22-24	Total 18-24
Living at Home	13,015 (79.0)	3,545 (47.8)	16,560 (69.4)
Not Living at Home	3,455 (21.0)	3,865 (52.2)	7,320 (30.6)
Total	16,470 (100.0)	7,410 (100.0)	23,880 (100.00)

If analysis is to be conducted using the family variables for full-time university students then a reasonably high proportion, 79.0%, of the younger, 18-21 group are represented. For the 18-24 age group the figure is 69.4%. The percentage of full-time university students by living arrangement for 1971, 1976 and 1981 is shown in Table I.7. The percentage of those living at home is lower in 1976 than in the other two years. There is little difference between 1971 and 1981. In both years approximately 79.0% were living at home.

TABLE I.7

% DISTRIBUTION FULL-TIME UNIVERSITY STUDENTS BY AGE AND LIVING ARRANGEMENT

	1971		1976		1981	
	Living at Home	Not Living at Home	Living at Home	Not Living at Home	Living at Home	Not Living at Home
18-21	78.9	21.1	73.5	26.5	79.0	21.0
18-24	68.3	31.7	62.5	37.7	69.4	30.6

Details are given in Appendix VI

The position is not the same for full-time non-university students as it is for university students. A higher proportion of full-time, non-university students, both in the younger age range (18-21) and for the total age group (18-24) are reported as not living at home in all three census years.

The proportion is lowest in 1976, as it is for university students. In all years, however, a higher proportion of non-university students than university students are not living at home. The comparison is shown in Table I.8.

TABLE I.8

% OF FULL-TIME STUDENTS REPORTED AS LIVING AT HOME

18-21 and 18-24 BY TYPE OF INSTITUTION ATTENDED

	1971	1976	1981
18-21			
University only	78.9	73.5	79.0
Non-University only	66.0	58.5	61.0
18-24			
University only	68.3	62.5	69.4
Non-University only	58.7	49.1	49.6

In 1981 just under half of the 18-24 non-university full-time student group was reported as living at home. For the 18-21 age group the percentage is greater but even then a significant percentage of the younger, full-time non-university students are living on their own in all three census years. Further details are given in Appendix VII.

Can the family variable data be used to examine part-time students? Table I.9 shows that typically the part-time student does not live at home. Only 23% of university and 29% of non-university students in 1981, studying part-time, were classified as living at home. Further details on the part-time student is given in Appendix VIII. The family variables cannot be used to explore participation of the part-time student.

TABLE I.9
NUMBER AND PERCENTAGE DISTRIBUTION OF STUDENTS 18-24
BY TYPE OF INSTITUTION, BY LIVING ARRANGEMENT
1891 (Part-Time Students)

	University	Non-University	University and Non-University	Total
Living at Home	825 (23.0)	3,725 (29.0)	670 (20.4)	5,220
Not Living at Home	2,765 (77.0)	9,100 (71.0)	2,620 (79.6)	14,485
Total	3,590	12,825	3,290	19,705

In summary, the extent to which results obtained from an analysis of the "family variables" can be extended to cover all 18-24 year old students is severely limited. The fact that the data are for one section only of the student population must always be borne in mind. Further, the proportions of the living at home group of all students varies between 1971, 1976 and 1981.

Data on the family variables may provide a reasonably reliable picture of the younger (18-21), full-time university population where a high proportion of such students live at home. There is no way of systematically exploring if the 18-21 full-time university student group who do not live at home differ significantly from those who live at home.

The students who fall into the "living at home" group are much less representative, however, of part-time students, irrespective of which type of institution is attended or age group considered. Likewise, the living at home group constitute a smaller percentage of the students who are attending P.S.E. institutions other than university than they do for university students. For all students, irrespective of the type of institution attended or whether studying full or part-time, in the 18-24 age group those living at home make up virtually half (49.9%) of the total number of students. For students in the 18-21 age group those living at home are 65.1% of the total number of students.

The extent to which the students for whom the family variables data are available, those living at home, are representative of the total students group (those living at home and those not living at home) is given for 1981 in summary form in Table I.10

TABLE I.10

STUDENTS REPORTED LIVING AT HOME AS A PERCENTAGE OF ALL STUDENTS

1981

CATEGORY	%
All Post-Secondary, Full- and Part-Time	
18-24	49.9
18-21	65.1
22-24	24.8
Urban (18-24)	47.6
Rural (18-24)	67.1
Male (18-24)	51.2
Female (18-24)	48.1
All Post-Secondary, Full-Time	
18-21	69.9
18-24	58.8
University, Full-Time	
18-21	79.0
22-24	47.8
18-24	69.4
Non-University, Full-Time	
18-24	49.6
Part-Time Students (18-24)	
University	23.0
Non-University	29.0

All of the data, irrespective of living arrangements, are for the 18-24 age group. It should be remembered that not all students are drawn from this age group. A growing, and significant, number of students are now 25 and over. The rates vary by the type of institution and the type of enrolment. It is estimated that anywhere from 25% to 30% of full-time students in 1981 are 25 years of age or over. The study can make no statement about students older than 25; and especially about the important number of older part-time students.

APPENDIX II: DEFINITIONS

The data and results must be reviewed in the context of the definitions used in the census for the years used and in light of the questions asked.

Appendix IX provides additional background information on the questions and definitions used, taken from the 1981 Census Dictionary. Some of the more important aspects of these technical points are listed below.

(i) Urban-Rural

In 1981 urban refers to an area having a population concentration of 1,000 or more and a population density of 400 or more per square kilometre. Rural refers to all territory lying outside urban areas.

(ii) Ethnic Background

Data on ethnic background is derived from the census question on the first language learned in childhood and still understood by an individual. It was used in the census for all three years with only minor wording changes.

Note that only very limited inferences can be drawn about strength of ethnic identification or about cultural values which may be seen as being associated with identification with a particular ethnic group. To be required to understand the first language learned may, however, be seen as defining some degree of "ethnic attachment."

The data gives a useful working definition of ethnic background but there are some ambiguities with it. For example the English category can include people from many different backgrounds (for example a fourth generation Canadian of originally German stock, a recent immigrant from the West Indies and a student whose parents immigrated from the U.K. in the 1960's). Persons with the same ethnic background by ancestry may fall into different categories if one of them does not now understand the language first learned. Ambiguity may also arise where the parents came from different ethnic backgrounds.

Overall, however, the resulting distribution by ethnic background seems to be reasonable in light of existing perceptions of, and data on, the ethnic mix of the Alberta population, and provides a reasonable set of data from which to explore participation.

(iii) Highest Level of Schooling

This question provides the data on parental educational levels and the highest level of parental education. Details are given in Appendix IX. It should be noted that there were differences in the categories used between 1981 and 1971 and 1981. For example, in 1976 the "trades certificate or diploma" and "university certificate or diploma above bachelor level" were not used. In 1971 the question focused more strictly on university qualifications.

In the analysis the number of categories has been reduced by collapsing together some of the categories in order to simplify the analysis. Given the level of analysis which is being carried out the data would seem to provide a reasonable and acceptable guide to the highest level of schooling obtained.

(iv) School Attendance

Each of the censuses in 1971, 1976 and 1981 asked questions concerning attendance at education institutions. Attendance was for a reference period. In 1981 it was September 1980 to June 3, 1981. The data are organized into the categories of university only, non-university only and a total post-secondary. In 1981 the data also include a category university and/or other non-university education to cover situations where persons reported dual enrolment in the reference period at both types of institutions (either in sequence or over the same time frame). For 1971 detail on attendance is not as clear cut as it is for 1976 and 1981 and must be inferred from the responses.

The change in categories may mean attendance classified as "university only" and "non-university only" in 1981 are artifically lowered. Comparison of "total post-secondary" may give a more accurate reading on trends in participation over the time covered by the study. It is believed that the new category "university and/or non-university" only became of appreciable significance in 1981. Further details on the questions and categories on attendance are given in Appendix IX.

(v) Blishen Scale

The Blishen Scale is a well established, derived measure of socio-economic status which is based on the ranking of occupation by prestige, occupational level and family income. Data to construct the scale are available only for 1971 and 1981. The scale was adapted to give a high-medium-low breakdown.

APPENDIX III
NUMBER AND PERCENTAGE DISTRIBUTION OF 18-24 AGE POPULATION BY LIVING AT HOME AND NOT LIVING AT HOME

	1971		1976		1981	
	LIV.H.	N.L.H.	LIV.H.	N.L.H.	LIV.H.	N.L.H.
18-24 Age Group						
Urban	55,165	98,785	69,945	135,015	89,190	202,610
% Urban	35.8	64.2	34.1	65.9	30.6	69.4
Rural	21,135	16,745	22,080	24,825	26,475	29,300
% Rural	55.8	44.2	47.1	52.9	47.5	52.5
18-24 Age Group						
Male	47,855	53,465	57,055	70,560	70,430	107,425
% Male	47.2	52.8	44.7	55.3	39.6	60.4
Female	28,455	68,500	34,970	90,280	45,230	124,495
% Female	29.3	70.7	27.9	72.1	26.6	73.4
Age						
18-21	62,610	46,135	75,245	72,520	91,245	99,715
% 18-21	57.6	42.4	50.9	49.1	47.8	52.2
22-24	13,695	69,390	16,780	88,320	24,425	132,195
% 22-24	16.5	83.5	16.0	84.0	15.6	84.4
18-24	76,305	115,525	92,030	160,840	115,665	231,915
% 18-24	39.8	60.2	36.4	60.6	33.3	66.7

LIV.H. - Persons who reported in census that their permanent residence was with parents.

N.L.H. - Persons living independently of parents as reported in census.

Totals may not add due to Statistics Canada rounding.

APPENDIX IV
NUMBER AND PERCENTAGE DISTRIBUTION OF STUDENTS ATTENDING P.S.E. INSTITUTIONS BY LIVING AT HOME AND NOT LIVING AT HOME
(FULL-TIME AND PART-TIME STUDENTS)

	1971		1976		1981	
	LIV.H.	N.L.H.	LIV.H.	N.L.H.	LIV.H.	N.L.H.
18-24 Age Group						
Urban	18,780	15,665	24,645	26,745	29,960	32,960
% Urban	54.5	45.5	48.0	52.0	47.6	52.4
Rural	4,935	1,050	4,770	2,325	5,475	7,685
% Rural	82.5	17.5	67.2	32.8	67.1	32.9
18-24 Age Group						
Male	14,175	9,960	16,780	15,950	20,150	19,190
% Male	58.7	41.3	51.3	48.7	51.2	48.8
Female	9,530	6,750	12,635	13,125	15,290	16,465
% Female	58.5	41.5	49.0	51.0	48.1	51.9
Age						
18-21	19,400	7,220	23,695	13,370	27,375	14,690
% 18-21	72.9	27.1	63.9	36.1	65.1	34.9
22-24	4,315	9,495	5,725	15,695	8,055	20,960
% 22-24	31.2	68.8	26.7	73.3	27.8	72.2
18-24	23,715	16,715	29,425	29,065	35,440	35,650
% 18-24	58.7	41.3	50.3	49.7	49.9	50.1

Notes: (i) LIV.H./N.L.H. - see Appendix III.

Totals may not add due to Statistics Canada rounding.

APPENDIX V

NUMBER AND PERCENTAGE DISTRIBUTION OF STUDENTS ATTENDING P.S.E. INSTITUTIONS BY LIVING AT HOME AND NOT LIVING AT HOME

(FULL-TIME STUDENTS ONLY)

	1971		1976		1981	
	LIV.H.	N.L.H.	LIV.H.	N.L.H.	LIV.H.	N.L.H.
18-24 Age Group						
Urban	16,985	10,365	21,370	17,405	25,600	19,705
% Urban	62.1	37.9	55.0	44.9	56.5	43.5
Rural	4,495	680	4,100	1,395	4,620	1,465
% Rural	86.9	13.1	74.6	25.4	75.9	24.1
18-24 Age Group						
Male	12,600	6,295	14,250	10,095	16,715	11,265
% Male	61.7	38.3	58.5	41.5	59.7	40.3
Female	8,875	4,745	11,225	8,705	13,505	9,900
% Female	65.2	34.8	56.3	43.7	57.7	42.3
Age						
18-21	17,835	5,705	20,890	9,890	24,050	10,335
% 18-21	75.8	24.2	67.9	32.1	69.9	30.1
22-24	3,650	5,335	4,585	8,910	6,170	10,830
% 22-24	40.6	59.4	34.0	66.0	36.3	63.7
18-24	21,480	11,040	25,480	18,800	30,225	21,165
% 18-24	66.1	33.9	57.5	42.5	58.8	41.2

Notes: (i) LIV.H./N.L.H. - see Appendix III.

(ii) P.S.E. for 1981 includes students listed as "university and non-university". This category was not given in 1971 and 1976.

Totals may not add due to Statistics Canada rounding.

APPENDIX VI

NUMBER AND PERCENTAGE DISTRIBUTION OF FULL-TIME UNIVERSITY STUDENTS BY LIVING AT HOME/NOT LIVING AT HOME, 1971, 1976 and 1981, BY AGE GROUP

	1971		1976		1981	
	LIV.H.	N.L.H.	LIV.H.	N.L.H.	LIV.H.	N.L.H.
18 - 21						
Number	13,830	3,690	14,115	5,080	13,015	3,455
Percent	78.9	21.1	73.5	26.5	79.0	21.0
18 - 24						
Number	16,980	7,875	17,600	10,635	16,560	7,315
Percent	68.3	31.7	62.3	37.7	69.4	30.6

Notes: (1) Liv.H./N.L.H.: See Appendix III.

APPENDIX VII
NUMBER AND PERCENTAGE DISTRIBUTION OF FULL-TIME NON-UNIVERSITY STUDENTS BY LIVING AT HOME/NOT LIVING AT HOME, 1971, 1976 and 1981, BY AGE GROUP

	1971		1976		1981	
	LIV.H.	N.L.H.	LIV.H.	N.L.H.	LIV.H.	N.L.H.
18 - 21						
Number	4,010	2,015	6,775	4,805	8,725	5,570
Percent	66.6	33.4	58.5	41.5	61.0	39.0
18 - 24						
Number	4,500	3,160	7,880	8,165	9,995	10,145
Percent	58.7	41.3	49.1	50.9	49.6	50.4

Notes: (1) Liv.H./N.L.H.: See Appendix III.

APPENDIX VIII
NUMBER AND PERCENTAGE DISTRIBUTION OF PART-TIME STUDENTS AT P.S.E. INSTITUTIONS BY LIVING AT HOME AND NOT LIVING AT HOME

	1971		1976		1981	
	LIV.H.	N.L.H.	LIV.H.	N.L.H.	LIV.H.	N.L.H.
18-24 Age Group						
Urban	1,795	5,300	3,275	9,340	4,360	13,260
% Urban	25.3	74.7	26.0	74.0	24.7	75.3
Rural	440	370	665	930	860	1,230
% Rural	54.3	45.7	41.7	58.3	41.1	58.9
18-24 Age Group						
Male	1,575	3,665	2,530	5,855	3,435	7,920
% Male	30.1	69.9	30.2	69.8	30.3	69.7
Female	655	2,005	1,410	4,410	1,790	6,565
% Female	24.6	75.4	24.2	75.8	21.4	78.6
Age						
18-21	1,565	1,515	2,810	3,485	3,335	7,360
% 18-21	50.8	49.2	44.6	55.4	43.3	56.7
22-24	665	4,160	1,145	6,780	1,890	10,125
% 22-24	13.8	86.2	14.4	85.6	15.7	84.3
18-24	2,230	5,670	3,940	10,270	5,220	14,490
% 18-24	28.2	71.8	27.7	72.3	26.5	73.5

Notes: (1) Liv.H./N.L.H.: See Appendix III.

Totals may not add due to Statistics Canada rounding.

APPENDIX IX: DEFINITIONS AND COMMENTS ON DATA AND VARIABLES

All of the following information is taken from the 1981 Census Dictionary issued by Statistics Canada. The extracts have been edited to exclude comments concerning:

(i) data and variables for censuses other than those of 1971, 1976 and 1981.

(ii) groups other than the 13-24 age group.

MOTHER TONGUE

Refers to the first language learned in childhood and still understood by an individual.

Censuses: 1981, 1976, 1971, 1961

Reported for: Total population.

Remarks: Respondents were instructed that they must still understand the language which is reported.

It should be noted that mother tongue, except for very young children, does not necessarily indicate language usage by a given individual at the time of the census.

Although the intent of the question has not changed since 1941 (i.e., the identification of the language first learned as a young child), the wording of the question itself has not been completely uniform. The most recent of these changes is from the 1971/76 wording of "language first spoken and still understood". This change was introduced so the question would conform to the definition of mother tongue given in the Official Languages Act, 1968-69.

SCHOOL ATTENDANCE

Refers to either full-time or part-time (day or evening) attendance at school, college or university at any time between September 1980 and June 3, 1981.

Censuses: 1981 (1/5 sample), 1976 (1/3 sample), 1971 (1/3 sample)**

Reported for: Population 15 years of age and over, excluding inmates.

Responses: No;
Yes, full-time;
Yes, part-time, day or evening.

Remarks: Attendance is considered to be full-time if the person was taking 75% or more of the normal course load in the grade or year in which the person is registered. Short-term courses of six weeks or less taken during the day are considered to be part-time attendance. If the person attended both full-time and part-time during the reference period, then only full-time is to be recorded. Attendance at courses that were taken for leisure or recreation is not included.

** In 1971, the term "school or university" was used rather than "educational institution" and the phrase "at any time" was not employed. Information on kind of institution attended was not requested.

SCHOOL ATTENDANCE LEVEL

Refers to the type or level of school attendance (either part-time or full-time) reported to the current schooling reference period (September 1980 to June 3, 1981).

Censuses:	1981 (1/5 sample), 1976 (1/3 sample)*
Reported for:	Population 15 years of age and over, excluding inmates, attending school full-time or part-time.
Responses:	Elementary-secondary; Other non-university education only; University only; University and/or other non-university education.
Remarks:	This is a derived variable using information from the directly measured education variables. There is a measure of indeterminancy in that the "university and/or other non-university education" code value cannot be further disaggregated. However, the variable does provide a fairly reliable measure of the break between elementary/secondary and schooling beyond that level.

* In 1976 this variable was directly reported on the census questionnaire as a subpart to the school attendance question. Each of the three levels was precisely defined. However, since the bias problem for the attendance data affected the elementary/secondary level of attendance data, this category was not usable. On the other hand, the university and "post-secondary" non-university data were relatively unaffected by the response bias in the attendance question, except for the attendance data, for the province of Quebec, where the allocation of CEGEP (general) education to the university level was not consistent.

SCHOOLING: HIGHEST DEGREE, CERTIFICATE OR DIPLOMA

Refers to the **highest** degree, certificate or diploma obtained.

Censuses:	1981 (1/5 sample), 1976 (1/3 sample)*, 1971 (1/3 sample)**
Reported for:	Population 15 years of age and over, excluding inmates.
Responses:	No degree, certificate or diploma; Secondary (high) school graduation certificate; Trades certificate or diploma; Other non-university certificate or diploma; University certificate or diploma **below** bachelor level; Bachelor's degree(s); University certificate or diploma **above** bachelor level; Degree in medicine, dentistry, veterinary medicine or optometry; Master's degree(s); Earned doctorate.

Remarks: This is a derived variable obtained from the education qualifications question which asked for **all** degrees, certificates or diplomas to be reported. Although the sequence is more or less hierarchical, it is nonetheless a general, rather than an absolute, gradient measure of academic achievement.

The following qualifications are to be noted: (i) a secondary (high) school graduation certificate is one which is classifiable as junior or senior matriculation, general or technical-commercial; (ii) a trades certificate or diploma is obtained through apprenticeship (journeyman's) training and/or in-school training in trades-level vocational and pre-vocational courses at community colleges, institutes of technology and similar institutions where the minimum entrance requirement was less than secondary (high) school, junior or senior matriculation, or equivalent; (iii) an "other non-university certificate or diploma" is obtained in a community college (both transfer and semi-professional career programmes), CEGEP (both general and professional), institute of technology, or any other non-degree-granting educational institution. Also included in this category are teaching certificates awarded by provincial departments of education, with the exception of teacher's qualifications at the bachelor level obtained at university-affiliated faculties of education; (iv) university certificates or diplomas are normally connected with professional associations in fields such as accounting, banking, insurance, etc. If a bachelor degree is a normal prerequisite for a university certificate or diploma course, then the latter is classified as a university certificate/diploma above the bachelor level.

* In 1976, "trades certificate or diploma" and "university certificate or diploma above bachelor level" were not included.

** In 1971, this question related only to university degrees, certificates or diplomas. The responses in 1971 were: No university degree, certificate or diploma; University certificate or diploma (below Bachelor level); Bachelor degree; First Professional degree; Master's or equivalent, or earned Doctorate.

SCHOOLING, HIGHEST LEVEL OF

Refers to the highest grade or year of elementary or secondary school attended, or the highest year of university or other non-university completed. University education is considered to be above other non-university. Also, the attainment of a degree, certificate or diploma is considered to be at a higher level than years completed or attended without an education qualification.

Censuses: 1981 (1/5 sample), 1976 (1/3 sample)*, 1971 (1/3 sample)*

Reported for: Population 15 years of age and over, excluding inmates.

Responses: Highest level of schooling is depicted in 1981 Census output in a variety of forms; the most comprehensive and general listing is as follows:

- Elementary-secondary only
  - No schooling or kindergarten only
  - Grades 1-4
  - Grades 5-8
  - Grades 9-10
  - Grades 11-13
  - Secondary (high) school graduation certificate
  - Trades certificate or diploma
- Other non-university education only
  - Without other non-university or trades certificate or diploma
  - With trades certificate or diploma
  - With other non-university certificate or diploma
- University
  - University, without university degree
    - Without other non-university education
      - Without certificate, diploma or degree
      - With trades certificate or diploma
      - With university certificate or diploma below bachelor level
    - With other non-university education
      - Without certificate, diploma or degree
      - With trades certificate or diploma
      - With other non-university certificate or diploma
      - With university certificate or diploma below bachelor level
  - University, with university degree
    - With bachelor or first professional degree
    - With university certificate above bachelor level
    - With master's degree
    - With earned doctorate

Remarks: Although this variable is described as "highest level of schooling", implying a hierarchy of educational attainment, there are in fact a number of instances which are not quite hierarchical. For example, the placement of "trades certificate" is justified on the basis of the fact that this educational qualification is obtained primarily for employment/ occupational purposes by persons who were, on the whole, beyond the secondary school age level at the time. The fact remains, however, that a sizable proportion of this group did not obtain their secondary school graduation certificate. This proportion would, therefore, be strictly speaking "out of line" in the hierarchy. In any event, placing this whole category below secondary would not necessarily resolve the problem, since at least some part of this group do have secondary school graduation. It is for this reason that the data for trades (and other non-university) certificates are separately disaggregated in the variable SCHOOLING: TRADES AND OTHER NON-UNIVERSITY CERTIFICATES.

Another example in which the hierarchical element of this variable is rendered slightly askew is in the case of persons who have completed both university and non-university education. In terms of a specific instance, a person, say, with less than 1 year (of completed courses) of university and likewise for non-university, but with no degrees, certificates or diplomas, would nonetheless be situated at a "higher" level than a person who has "only" other non-university education, but with a certificate or diploma.

* In 1971 and 1976, this variable was denoted as "level of schooling". In 1971, it was defined as "the highest grade or year of elementary, secondary school or university ever attended and whether or not additional training in the form of vocational or post-secondary non-university was present". In 1976, the definition was slightly revised to emphasize **completion** (rather than attendance) beyond the secondary level: "Level of schooling refers to the highest grade or year of elementary/secondary attended, or the highest year of post-secondary non-university or university completed by the person".

SCHOOLING: TRADES AND OTHER NON-UNIVERSITY CERTIFICATES

Refers to the possession of either a trades certificate or diploma, or other non-university certificate or diploma, or both, regardless of whether other educational qualifications are held or not.

Censuses: 1981 (1/5 sample)*

Reported for: Population 15 years of age and over, excluding inmates.

Responses:
Neither trades nor other non-university certificate;
Trades certificate, without secondary certificate;
Other non-university certificate, without secondary certificate;
Both trades and other non-university certificates, without secondary certificate;
Trades certificate, with secondary certificate;
Other non-university certificate, with secondary certificate;
Both trades and other non-university certificates, with secondary certificate.

Remarks: This derived variable indicates all of the possible combinations in conjunction with trades and other non-university certificates or diplomas and the presence or absence of the secondary school graduation certificate. This information is very useful in indicating the possible overlap and the interrelations between the two areas.

A trades certificate is usually obtained through apprenticeship or journeyman's training over several years duration, in trade occupations such as welding, plumbing, and carpentry; it may also be accompanied by periods of in-school training in community colleges or other such institutions. A non-university certificate or diploma is obtained from non-degree-granting institutions such as nursing schools, community colleges, CEGEPs, institutions of technology, private and trade schools, or private business colleges.

* In 1971, a special series of questions and data were related to Apprenticeship and Vocational Training. The 1981 data for trades certificates are not directly comparable to the 1971 vocational course data. In addition, the 1971 data allowed for the distinction between apprenticeship and full-time vocational training, as well as indicating the length and the date of completion of the training. The 1981 trades certificate data, however, may allow for rough comparisions between 1971 and 1981, particularly when combined with occupation information.

SCHOOLING: UNIVERSITY CERTIFICATE ABOVE BACHELOR LEVEL

Refers to the possession of a university certificate or diploma above the bachelor level, regardless of whether other educational qualifications are held or not. Normally, this type of certificate is obtained following a first degree in the same field of study, or following a master's or first professional degree.

Censuses: 1981 (1/5 sample)

Reported for: Population 15 years of age and over, excluding inmates.

Responses: No certificate or diploma above bachelor level;
Certificate or diploma above bachelor level.

Remarks: This derived variable provides a more complete count of all persons with this educational qualification, regardless of what other qualifications were obtained. Diplomas or certificates obtained following a first degree in the same field of study (e.g., a diploma in education) are counted as such in the "Highest Degree, Certificate or Diploma" variable, since they are counted above the bachelor degree. However, these types of certificates or diplomas are also granted following either a master's or first professional degree (e.g., in medicine). In these cases, the latter degrees take precedence in the "Highest Degree..." variable, and no count is available for persons with these higher degrees and the university certificate above the bachelor level. Examples of such certificates can be found in university programmes or courses in medical specializations or applied engineering and high technology areas.

SEX

Refers to the gender of the respondent.

Censuses: 1981, 1976, 1971

Reported for: Total population.

Responses: Male; Female.

URBAN AREA

Refers to an area having a population of 1,000 or more and a population density of 400 or more per square kilometre.

Censuses: 1981, 1976*, 1971**

* The population density criterion in 1976 was 1,000 persons per square mile (386 per square kilometre).

** For the 1971, 1966 and 1961 Censuses, urban areas included (1) all incorporated cities, towns and villages with a population of 1,000 or over; (2) all unincorporated places of 1,000 population or over having a population density of at least 1,000 per square mile; and (3) the urbanized fringe of (1) and (2) where a minimum population of 1,000 and a density of at least 1,000 persons per square mile existed.

RURAL AREA

Refers to all territory lying outside "Urban Areas".

Censuses: 1981, 1976, 1971

APPENDIX X: APPLICABLE 1981 CENSUS QUESTIONS

Living at Home/Not Living at Home

Print below the names of all persons usually living here as of Wednesday, June 3, 1981.

INSTRUCTIONS FOR QUESTION 1

WHOM TO INCLUDE

To make certain that every resident of Canada is counted in the census (and that no one is counted more than once), the following guidelines should be used when deciding who should be included on this questionnaire.

Include

- all persons who usually live here, even if they are temporarily away (such as on business or at school):
- any persons staying or visiting here who have no other usual home;
- persons who usually live here but are now in an institution (such as a hospital, correctional institution), if they have been there for less than six months;
- unmarried persons who have a home elsewhere but stay in this dwelling most of the week while working;
- infants born on or before June 2, 1981;
- deceased persons who were alive at midnight between June 2 and June 3, 1981.

Do Not Include

- persons who are now in an institution and have been there for the past six months or longer;
- infants born on or after June 3, 1981;
- persons permanently away in the Armed Forces;
- post-secondary students who are financially independent and who live elsewhere;
- unmarried sons or daughters who live elsewhere most of the week while working, even if they return home on the weekends;
- foreign residents (see front cover).

Mother Tongue

What is the language you first learned in childhood and still understand?

☐ English
☐ French
☐ German
☐ Italian
☐ Ukranian
☐ Other (specify)

Instructions

You must still understand the language you report in this question. For infants, report the first language they are or will be learning.

Educational Levels and Attainment

- What is the highest grade or year of secondary (high) or elementary school you ever attended?
(See Guide for further information.)

☐ No schooling or kindergarten only
OR
Highest grade or year (1 to 13) of secondary or elementary school.

- How many years of education have you ever completed at universty?

☐ None
☐ Less than 1 year (of completed courses)
Number of completed years

- How many years of schooling have you ever completed at an institution other than a university, secondary (high) or elementary school? Include years of schooling at community colleges, institutes of technology, CEGEPs (general and professional), private trade schools or private business colleges, diploma schools of nursing, etc.
  (See Guide for further information).

  ☐ None

  ☐ Less than 1 year (of completed courses)

  Number of completed years

- What degrees, certificates or diplomas have you ever obtained?
  (See Guide for further information).
  Mark as many boxes as apply.

  ☐ None

  ☐ Secondary (high) school graduation certificate

  ☐ Trades certificate or diploma

  ☐ Other non-university certificate or diploma (obtained at community college, CEGEP, institute of technology, etc.)

  ☐ University certificate or diploma below bachelor level

  ☐ Bachelor's degree(s) (e.g., B.A., B.Sc., B.A.Sc., L.L.B.)

  ☐ University certificate or diploma above bachelor level

  ☐ Master's degree(s) (e.g., M.A., M.Sc., M.Ed.)

  ☐ Degree in Medicine, dentistry, veterinary medicine or optometry (M.D., D.D.S., D.M.D., O.D.)

  ☐ Earned doctorate (e.g., Ph.D., D.Sc., D.Ed.)

Attending P.S.E.

- Have you attended a school, college or university at any time since last September? (Include attendance at elementary or secondary schools, business or trade schools, community colleges, institutes of technology, CEGEP's, etc.)
  Mark one box only.

  ☐ No

  ☐ Yes, full-time

  ☐ Yes, part-time, day or evening
